

The University of Chicago

THE STUDENT AND  
THE FINANCING OF THE COLLEGE

A STUDY OF STUDENT FEES, STUDENT AID  
AND FACTORS AFFECTING THE PROPORTION OF THE  
COST OF HIGHER EDUCATION BORNE BY  
THE STUDENT

A PART OF A DISSERTATION SUBMITTED TO  
THE FACULTY OF THE DIVISION OF THE  
SOCIAL SCIENCES IN CANDIDACY FOR  
THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATION

1935

By  
JORDAN TRUE CAVAN

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CHICAGO, ILLINOIS

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## CHAPTER I

### INTRODUCTION

The private colleges of the United States receive their operating income principally from (1) the earnings derived from the investment of endowment funds, (2) gifts for current expenses, and (3) fees from students. The endowment funds and the gifts for current expenses have come from individuals and organizations friendly to the college. The income of private colleges may therefore be thought of as coming from sources of two types: philanthropic gifts and student fees. The means to establish, and later to expand, the physical plants of most private colleges also have been provided by philanthropic gifts. Until recently, the tendency has been to regard fees as a secondary source of income, unfortunately necessary to bridge the gap between the amount of income received from endowment and gifts and the minimum amount necessary to operate the college.

Prior to the Civil War, the demands upon friends of the college and philanthropists were not heavy, as funds were requested chiefly for current operating expenses and were secured through small gifts and subscriptions. Permanent endowments were small. Gradually, colleges and church bodies began to build up permanent endowments in order to assure to colleges greater stability of income. In order to secure the large endowments needed, far more had to be raised each year than under the method of current gifts. During periods of rapid growth in enrollments, successive campaigns had to be launched to provide plant and endowment adequate for the needs of the additional students. The increasingly large sums sought for endowment placed a heavy burden upon friends of the college and especially upon large-scale contributors.

Within the last two decades serious discussion has arisen as to whether philanthropy may fairly be expected to provide the huge endowment funds necessary to yield income large enough to care for a major portion of the operating expenses. Articles in proceedings of professional societies, educational journals, and even popular magazines and newspapers have contained discussions of the advisability of radical increases in fees and the possible effects of such increases upon enrollments and upon the selection of students; they also call attention to the need for funds for

the additional student aid that would be necessary if fees were increased.

Most of these published articles present points of view and opinions. The objective studies that have appeared tend to be limited in scope. For example, several studies analyze the trends of tuition fees in selected groups of colleges; other studies concern loan funds and procedures; others the financial support of groups of colleges. Surveys have appeared that cover more or less completely the items of income and expenditure of limited groups of colleges. Thus trends in fees, sources of income, and problems of student aid have been investigated as independent problems. But no study has as yet appeared which analyzes, with ample data for a definite group of colleges, the whole problem of the relation of the student to the financing of the college. This study therefore analyzes data concerning trends in fees, types and amounts of student aid, the relation of student aid to fees, the relation of fees and of student aid to endowment income and other sources of income, the relation of various types of student aid and of financial interrelationships to the excellence of the college, and the probable effect of the proposal to impose tuition fees equal to the cost of the education furnished. The primary body of data used in the study was secured by an experienced survey staff from thirty-five colleges related to the Methodist Episcopal Church.

In order to give the reader a better understanding of the issues involved, a brief analysis is presented in the next chapter of the situation prior to the World War and of the points of view that have developed since. As the colleges included in the present study, with two exceptions, are located in the north central and western portions of the United States, the discussion which follows will more particularly concern colleges in these sections.

## CHAPTER II

### HISTORICAL BACKGROUND

#### Philanthropy as the Principal Source of Support of Higher Education

Since the origin of the American college system it has been true that in most private colleges the fees paid by students constitute less than half of the total educational income and care for less than half of the total annual educational expenditures. A survey of colleges made in 1832 revealed that the proportion of the total income derived from tuition fees rarely exceeded 30 per cent. Studies made since 1910 show that this early estimate understates only slightly the proportion of the annual expenditures paid by the students in many colleges during the past twenty-five years. There has been a tendency in more recent years, however, for income from fees to constitute a higher percentage of the total income for educational purposes. Thus Cowen, in a study of 109 private colleges, found that in the median college the income from fees constituted 41 per cent of the total receipts for educational purposes in 1910, 41 per cent in 1915, 40 per cent in 1920, 47 per cent in 1924, and 48 per cent in 1930.<sup>1</sup>

This situation, in which the student typically pays less than half of the amount expended annually upon his education, is the result of deeply rooted precedents in the practices and policies of American colleges.

Colleges as ministerial training schools.- It is doubtful whether it would be possible to over-emphasize the influence of the early purposes of the private colleges upon recent, and even upon present, fee-policies.

The primary function of the Colonial college and of the colleges established in the Middle West during the early part of the nineteenth century was the training of clergymen. As leadership in the community and the state, as well as in the church, tended to be assumed by ministers, church and community accepted as a justifiable responsibility the duty to help establish and

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<sup>1</sup>Philip A. Cowen, "College Tuition Trends," School and Society, XXXIII (May, 1931), 738.



finance colleges and to assist students.

The aid given to the colleges by church bodies and church members made it possible and justifiable for colleges to charge low fees and to give special aid to ministerial students. Many colleges announced that all students studying for the ministry would be exempted from the payment of fees. This practice of remitting fees was extended to the sons of ministers. Certain colleges went further and announced that no student would be refused admission because he lacked funds with which to pay fees.

All three types of reduction or remission of fees have continued in use until the present time. An inspection of recent catalogs of forty colleges showed that nineteen colleges announced reductions or cancellations of one or more types: three colleges remit all or part of the fees to licensed ministers, fifteen to ministerial students, and eleven to the sons or daughters of ministers; one college announced that no "worthy student" would be refused admission to the college merely because he was unable to pay for tuition. The catalogs of twenty-one colleges contained no statement regarding reduction or cancellation of fees of these types. The colleges making the reductions or remissions are connected with nine different Protestant denominations.

Historically, colleges were regarded as subsidiary to the church, their function being to train ministers and other Christian leaders. They were regarded as charitable institutions, to be supported principally by gifts and only secondarily by fees paid by students. The precedent was firmly established that colleges should receive a large part of their operating income from gifts.

Today, most colleges regard themselves as part of the educational service of the area in which they are located rather than as subordinate units of a church organization. Few regard their primary function as the training of ministers. Many have cast off all denominational ties and describe themselves as "non-sectarian." Even those colleges that receive financial aid from a denominational board regard themselves as independent institutions. Nevertheless, many private colleges still maintain that they are especially qualified to train community leaders and therefore that they are entitled to financial support in the form of gifts for current expenses or to add to endowment funds. Terming their institutions "liberal arts colleges," "Christian colleges," "intimate colleges," "independent colleges," or "cultural colleges," presidents and other administrators emphasize the importance to American civilization of having a large group of citizens educated in cultural subjects, under the conditions of close association of students and faculty found in the small private college. Col-

leges which still maintain definite denominational connections emphasize the importance of the religious atmosphere of the Christian college. The small private colleges conceive of themselves as superior to the large private or state universities as agencies for cultural education and the formation of character. All of these functions are cited as reasons for maintaining low fees in order that students can afford to attend college and for seeking large gifts in order that the institution may be continued.

Poverty of the frontier.- The development of higher education in America along the line of an advancing frontier has also tended to keep fees at a low level. A comparison of the dates of opening of colleges still in existence with the dates of admission of the states in which they are located shows that in most states the earliest colleges were established as soon as the state was permanently settled. Colleges tended to precede the accumulation of capital and the establishment of money-producing industries. College buildings and living quarters were of the simplest. Salaries of the faculty were very low. It was necessary that fees should be very low; otherwise, students could not attend.

Even today tuition fees vary widely from state to state and reflect the recency of frontier conditions in some parts of the country. The median tuition fees charged in private colleges and universities are highest in the long-established states on the North Atlantic seaboard, and lowest in certain economically undeveloped states of the south and west. The median tuition fee in the states on the North Atlantic seaboard ranges from \$200 to \$400. The median tuition fee in the states east of the Mississippi River and north of the Ohio River ranges from \$158 to \$190. In the two tiers of northern states immediately west of the Mississippi, the median fee ranges from \$125 to \$155. In the Rocky Mountain states the median fee ranges from \$91 to \$172, and on the Pacific Coast from \$128 to \$225 (California). In the South the median tuition fees tend to be low: the range is from \$85 (Kentucky) to \$192 (Florida). In certain parts of the West and the South which constitute the present cultural and economic frontier, fees are much lower than in areas of longer settlement and greater economic development.

The comparison of the median tuition fee for each state with the per capita wealth of the state shows that colleges in states with high per capita wealth tend to charge higher fees than do colleges in states with low per capita wealth. There are eleven exceptions to this general statement. The exceptions are the Rocky Mountain states (Washington, Utah, Idaho, Montana, and Oregon) and certain of the western agricultural states (Kansas,

Minnesota, North Dakota, South Dakota, Iowa, and Nebraska). All these states have high per capita wealth but have low median fees. There are several possible explanations. The wealth of the Rocky Mountain states is in part in mines, which are owned often by persons residing outside of the state; the per capita wealth therefore may not indicate the spending power of the residents of the state. The estimated per capita wealth of the agricultural states is affected by the high prices paid for land after the World War and may not represent proportionally high amounts of cash available for current personal expenditures.

This comparison of the median fee for the private colleges in each state with the per capita wealth of the state suggests that in many parts of the country low fees are in part a response to economic conditions that resemble the frontier conditions which existed until recently.

The needy student.— Colleges have tended to place a special value upon service to poor students and upon education for the poor. It was the general belief of college administrators and professors and of ministers that the more serious-minded and pious students came from poor families. Thus one tract published in 1847 by the Society for the Promotion of Collegiate and Theological Education at the West states that the church must take the financial responsibility for educating the ministry "because God, in his wisdom, has ordered it, that his ministers, as a general thing, are from the poor." Another statement, from Barnard's American Journal of Education, published in 1856 reads: "And since the sons of the industrial classes are usually brought up to greater habits of industry, and with a higher appreciation of the value of time, the students of those classes do in part share more largely in the college honors and distinctions, and enjoy a higher degree of consideration than the sons of the rich and the great."

It was an accepted policy that tuition fees must be kept very low in order that these desirable students might be educated. The poor students, because of their industry and piety, were of chief interest to the college. The sons of rich men were admitted because they needed the Christian influence of the college. Colleges were proud of their practice of accepting all students whether or not they were able to pay the tuition fees. The student who received a reduction or a cancellation of fees discharged his obligation to the college after his graduation, in service as a minister or a missionary, in contributions made to the college, or in the solicitation of contributions for the college from others.

In order that these poor but highly valued students could be educated it was necessary that fees should remain at a minimum,



that special concessions should be made to the very poor, and that the chief support of the college should be sought from other sources than fees.

In modified form, the same attitude prevails today, especially in the less prosperous parts of the country. Colleges pride themselves on the small amount of money necessary for attendance, and a few colleges state openly in their catalogs that students unable to pay the tuition fee will not be refused admission.

Competition between institutions.- Fees were kept at a low level also by a fourth factor - the tendency for each denomination to regard education as a means of winning the newly settled western states to its particular cause. Many small denominational colleges were established which today represent not only the competition of denomination against denomination, but within a single denomination of college against college as well. In 1928-29 in Illinois alone, sixteen denominations were represented by affiliated private colleges, one denomination by as many as six institutions, and two denominations by four institutions each. In Iowa in the same year, ten denominations were represented by colleges; two denominations had as many as five affiliated colleges each.

At present, most colleges do not emphasize denominational differences in religious beliefs. They tend to offer almost identical educational programs and to enroll students of all religious faiths. They do not have a definite denominational constituency to which they can look for financial aid and for students. Each college must compete for money and students with every other college in a limited area. Studies of denominational colleges show that these colleges tend to draw students from an area with a radius of less than one hundred miles from the college. But rarely does a college hold undisputed dominance over such an area. For example, in northern Illinois exclusive of Chicago, in an area approximately two hundred miles square there are more than a dozen colleges.

So long as colleges compete with each other within limited geographical areas, and fail to offer distinctive programs, fees will probably tend to remain low. Certainly, without concerted action among competing colleges, one small college would hesitate to raise its fees materially above the fees charged by the institutions which it regarded as competitors.

Democracy in education; the rise of state universities.- The low fees or absence of fees in state universities, teachers colleges, and normal schools have tended to prevent private colleges in the same areas from increasing their fees. In 1928-29,

twenty-two state universities had free tuition, although most of them charged moderate fees of other types. Historically, the policy of granting free tuition was supported by a philosophy which emphasized the social value of higher education for everyone. Private colleges, in spite of their low fees and expenses, had provided higher education only to a limited number of students and had been interested primarily in one profession, the ministry. The state universities were founded in order to provide an equal opportunity for everyone; their purpose was to educate, not a select group of leaders, but the mass of the people.

Denominational colleges regard state institutions as competitors and hesitate to place their fees materially higher than the fees of the nearest state university. The tendency for fees in state institutions and in the private colleges to vary together, as the states are considered in turn, is shown by the coefficient of correlation of  $.361 \pm .090$  secured when the median of the fees charged by the private colleges of each state is correlated with the fee charged in the state university of that state.

#### The Movement to Increase Tuition Fees

The movement to increase tuition fees began soon after the close of the World War. The private colleges found themselves in urgent need of additional funds for buildings and operating expenses because of three changes: the annual increases in enrollments had become six times as large as they had previously been; the standardizing agencies had raised the requirements for the amount of endowment needed by a college for recognition; and the cost of living had doubled. The colleges sought to solve the problem in the traditional manner by seeking building and endowment funds from alumni and philanthropists. Many campaigns for funds were successful, and millions of dollars of additional endowment were secured. A reaction came, however, with the assertion by certain philanthropists and representatives of philanthropic organizations that fees must be increased sufficiently to equal a higher proportion of the operating expense or to equal the total operating expense; that endowments in perpetuity did not necessarily represent the wisest form of giving; and that the function of philanthropic foundations was not to contribute to general operating expenses but to provide funds for special projects.

During the same period the opinion was gradually growing among both the presidents and the business administrators of colleges that tuition fees should be increased. No unanimity of

opinion has been reached, however, as to the proportion of the operating cost that the fees should cover, and only a few colleges have tried the experiment of charging fees equal to the operating cost. Those not in favor of fees equal to the cost have argued that higher education benefits society and that therefore society should pay a part of the operating cost in private colleges; and that education in private colleges provides values not found in education in tax-supported institutions and that therefore private colleges should not be forced into a position of more severe competition with tax-supported institutions through the charging of high fees. The advocates of high fees have argued that college education benefits the student financially and increases his income and that he therefore may justly be asked to pay the full cost of his education; that the present system of using income from endowments to lower the fees to all students entails a certain percentage of waste, inasmuch as many students leave college before the completion of their course or fail to make a creditable record; and that the increases in fees have not caused students to enroll in tax-supported institutions rather than in private institutions, for the enrollments in private institutions have increased during a period of increasing fees.

There has been a common recognition of the need for increased student aid as fees have been increased. Opinion has varied as to the possibility of supplying all the aid needed if fees are further increased or if they are made equal to the cost of education. There has been a tendency in some quarters to advocate the extensive use of student loans, a method of aid which places the responsibility for paying the cost of his education upon the student, either through the immediate payment of fees or through the later payment of loans made to cover the amount of fees.

The economic depression which began in 1929-30 apparently has not permanently changed the general trend of policies and practices but has accentuated some of them. It seems probable that enrollments will again increase and that colleges will again strive to secure from student fees an increasing proportion of the cost of the education offered, with more extensive expenditures for student aid to help those unable to pay the increased fees.

The new tendency in accrediting colleges, to emphasize educational income per student rather than merely income from endowment, also indicates that fees may continue to be increased.



## CHAPTER III

### A STUDY OF THE RELATION OF THE STUDENT TO THE FINANCING OF THE COLLEGE

It is apparent that the problem of the part which the student should play in the financing of the private college is still in the stage of discussion. Opinions have been stated, and issues have been defined, but little has been done to discover the present status of the relative rôles of fees and of income from philanthropic sources (endowment funds and current gifts) in the financing of the college. The present study attempts to analyze data for a selected group of colleges so as to clarify a group of related problems pertaining to the student's part in the financing of the college.<sup>1</sup>

Background of this study of the relation of the student to the financing of the college.- A survey of the colleges related to the Methodist Episcopal Church was begun in the autumn of 1929 under the direction of Floyd W. Reeves and John Dale Russell. An opportunity to participate unofficially in this survey was granted to the writer, in order that he might study the problem of the student's relation to the financing of the college. The survey was conducted by means of a visit to each college by

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<sup>1</sup>This study was planned before the onset of the depression. The data represent the fiscal year 1928-29 or 1929-30. These years were just prior to and at the beginning of the general economic depression; in the agricultural states, however, where some of the colleges are located, the depression had been felt earlier. The data therefore represent conditions neither at the peak of prosperity nor at the depth of the depression, but a period more nearly "normal" than either. The depression has added to the financial worries of college administrators and has accentuated certain problems. It is the belief of the writer that an analysis of the situation which existed at the onset of the depression will aid in the formulation of future financial policies regarding endowment and fees. At appropriate places comments are made regarding the effect that the depression has had upon certain aspects of the situation.

the survey staff. During the visit, the staff, after inspecting the original records and consulting college officials, collected the necessary data upon a basis of uniform schedules for all colleges. Data upon the special schedules concerning student fees and student aid were secured by the survey staff along with the other data needed for the survey. The collection of the data by means of visits and the use of uniform schedules has provided comparable data, regardless of lack of uniformity among the accounting systems of the colleges. The writer accompanied the survey staff upon the visits to four colleges and for these colleges secured information more extensive than was called for upon the schedules.<sup>2</sup>

Full information concerning the colleges that were included in the study is published in the survey report on the whole group of colleges.<sup>3</sup> The thirty-five institutions included in the survey comprise almost all the liberal-arts colleges related to the Methodist Episcopal Church. With the exception of a few colleges in the East and South, they are located in the Middle West and West. Some of them are located in or near large cities, others in small towns. For the fiscal year studied, the number of students enrolled in the various colleges ranged from thirty-one (in a newly established college) to 1,785. When the colleges are grouped into five classes on the basis of enrollment, five colleges have fewer than 200 students, seven have from 200 to 399 students, twelve from 400 to 599, eight from 600 to 799, and three have more than 800 students. At the time the survey was made, seventeen of the colleges were upon the approved list of the

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<sup>2</sup>The writer assisted in drafting the schedules that were used in the survey to gather data on student fees, scholarships, loans, and other forms of student aid, and accompanied the survey staff on the visits to four colleges. The unpublished survey reports on the individual colleges each contained a chapter entitled "The Student and the Financing of the College." For the first reports prepared, while the form of analysis was being worked out, the writer made the first draft of the text and constructed the tables of the chapter. When the summary volume was in preparation, he prepared for the use of the survey staff a cumulative analysis of data, available in the individual survey reports or in the survey files, concerning student fees and forms of student aid. For the summary volume, see Floyd W. Reeves et al., The Liberal Arts College. Chicago: University of Chicago Press, 1932.

<sup>3</sup>Ibid., pp. 22ff.

Association of American Universities. The chief factor that entered into the selection of the colleges was affiliation with the Methodist Episcopal Church.

Degree to which Methodist colleges are typical of private colleges.- A comparison of the Methodist colleges with other private colleges of the same general type shows that the Methodist colleges may be considered typical of a much larger number of institutions. The institutions selected for comparison include all the four-year private colleges located in the Atlantic, north-central, and western portions of the United States, which have or have had some affiliation with a Protestant denomination. Colleges with fewer than two hundred or more than two thousand students were excluded as well as colleges for Negroes and those in which more than half of the enrollment consists of preparatory students. The group of 156 colleges so selected are of the same general type as the Methodist colleges - all privately supported, all organized under the influence of some Protestant denomination, most of them still affiliated with a denomination, all having the same general range of enrollment as the Methodist colleges, and located in the same parts of the country.

The points upon which comparisons could be made were determined by the information available in various surveys of higher institutions.<sup>4</sup> Information was available on the following points: enrollment, number of instructors, type of student admitted, accreditation by the Association of American Universities, tuition fee, value of buildings, amount of productive funds, and amount of endowment funds per student enrolled.

Since the other denominational colleges were selected as to size, the range in enrollment of these colleges is very similar to the range in enrollment of the Methodist colleges. There is a slight tendency for the Methodist colleges to have larger enrollments, according to the median and the third quartile. The number of persons on the faculty also tends to be larger in the Methodist colleges than in the comparative colleges, although the comparative

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<sup>4</sup>Information on the colleges was secured from:

Biennial Survey of Education, 1926-28. United States Office of Education Bulletin No. 16. Washington: Government Printing Office, 1930.

American Universities and Colleges, pp. 835-37. Edited by David Allen Robertson. New York: Charles Scribner's Sons, 1928.

Huber William Hurt, The College Blue Book, pp. 24ff. Hollywood-by-the-Sea, Florida: College Blue Book, 1928.



colleges have a wider range. The median number of faculty members is forty-one in the Methodist colleges and thirty-one in the comparative group. All except one of the Methodist colleges are co-educational; in the comparative group, 86.5 per cent of the colleges are co-educational, 7.1 per cent enroll only men, and 6.4 per cent only women. Almost half of the Methodist colleges are on the approved list of the Association of American Universities, but only 35.2 per cent of the comparative colleges are so approved.

On most of the financial items, the Methodist colleges show a more limited range than the other colleges but have the same central tendencies. The median tuition fee is \$150 in the Methodist colleges and \$140 in the comparative colleges. The median value of buildings, exclusive of dormitories, is \$383,413 in the Methodist colleges and \$304,542 in the comparative colleges. The median amount of productive funds is \$765,486 in the Methodist colleges and \$646,932 in the comparative colleges. The median amount of endowment, per student enrolled, is \$1,365 in the Methodist colleges and \$1,372 in the comparative colleges.

From this comparison it seems fair to assume that the Methodist colleges may be considered representative of the Protestant private colleges in the Atlantic, middle western, and western states, with enrollments varying between two hundred and two thousand students.

Statement of problems analyzed.— The general problem analyzed concerns the rôle of the student in the financing of the college. The old policy of financing colleges called for low fees, the use of income from gifts and endowments to lower equally the fees to all students, the use of scholarships and remitted fees to assist students unable to pay the fees, and the limited use of loans to students. Newer proposals advocate that fees should be equal to the cost of education and that extensive use should be made of income from endowment and current gifts to aid only those students who are unable to pay the new fee; scholarships are advocated for only the most promising students, with the extensive use of loans to aid the majority of those students who are unable to pay the fees. Except for the most promising students, the burden of paying the operating costs would be placed squarely upon the family of the student or upon the student himself. Two questions at once arise: What are the present practices of colleges with regard to fees and the use of student aid? Is the charging of fees equal to the full cost of education a practical possibility?

In the attempt to answer these questions, this study presents an intensive analysis, for a limited group of colleges, of certain financial trends and relationships, the relation of these

to the selection of students, and the wisdom and feasibility of charging the student the full cost of his education. The chief problems which are analyzed in this study, stated as questions, are these:

1. What has been the trend in fees, in actual dollars and in dollars of equal purchasing power?

2. What relation do the fees bear to expenditures?

3. What relation do changes in fees bear to changes in enrollment?

4. What relation have changing fees had to changing occupational incomes and to the incomes of different occupational groups? What are the implications of high fees for the selection of the most able students, in connection with the known differences in the average intelligence of occupational groups?

5. To what extent do colleges subsidize or assist students financially by scholarships and remitted fees, loans, employment of students by the college, or by failure to collect tuition fees when due? What policies control the administration of such forms of student aid?

6. What relation exists between the income received by the college from students and the income received from other sources? What net income does the college really secure from students after deductions are made for student aid, cost of recruiting, and economic loss on supplementary business activities? What is the relation of income from students to expenditures? To student aid?

7. What is the relation between the excellence of the college and such factors in college finance as types of assistance to students, amounts of such assistance, and the proportion of the total expenditures covered by income from students?

8. Could colleges, with their present resources, raise their fees to a "full cost of education" figure and still assist all students in their enrollment who would need assistance?

## CHAPTER IV

### FINDINGS

Fees.- Three problems concerning fees appear in the discussions of college finance: (1) trends in fees; (2) fees in relation to the expenditures of the college; and (3) fees in relation to the selection of students. The analysis of the data from the Methodist colleges results in eight significant findings concerning these three problems.

1. During the twenty-five year period from 1909-10 to 1933-34 fees increased until at the end of the period they were three to four times as high as at the beginning of the period.

2. The purchasing power represented by the tuition fee increased but in less degree during the first part of the period, because of the decreased purchasing power of the dollar. During the twenty-year period, 1909-10 to 1928-29, when the trend of fees was upward, the purchasing power almost doubled in amount; since the beginning of the depression in 1929 fees have tended to remain stable, but the purchasing power of the tuition fee has greatly increased because of the greater purchasing power of the dollar.

3. For the fiscal year studied, in the typical college the tuition fee charged was equal to 92.5 per cent of the amount of instructional salary per student enrolled.

4. In the typical college the tuition fee charged was equal to 56.8 per cent of the total amount of annual educational expenditures per student enrolled. Despite the increase in fees, in the typical college the student is charged only about one-half of the annual expenditure made for his education.

5. Although the increase in fees in private colleges may have tended to lessen increases in enrollment, advances in fees have not been demonstrated to be the only important factor in determining the trend which enrollment will take.

6. The increasing expensiveness of college education may be a factor in determining the selection of students from various occupational backgrounds. Tuition fees have increased more rapidly than have the earnings in certain typical occupations. It is therefore more difficult than formerly for many parents to provide the funds necessary for the college education of their sons and daughters.



7. During the general rise in the level of income and prices after the World War, the earnings of some occupational groups failed to keep pace with the general tendency of earnings to increase. Other groups receive relatively low average incomes at all times. High tuition fees (plus high charges for board and room) severely handicap students from such groups. When the average annual earnings are compared with the cost of living at a fair American standard, it is apparent that the earnings of some groups do not equal the cost of living, while in other groups savings extended over a twenty-year period would scarcely provide for the college education of two students.

8. The implications of the relation of fees to earnings becomes more significant when students are distributed according to the occupations of their fathers. Proportionately low percentages of students have fathers who are engaged in the various building and machine trades. A distribution of "A and B" caliber minds, as judged by the army tests, shows that there is a larger number of such minds among people in the skilled and semi-skilled labor groups than in any other one occupational group.

Most of the colleges in the Methodist group do not reach the standards advocated in the early 1920's that students should be charged tuition fees sufficient in the aggregate to meet instructional salaries; none reaches the later standard advocated, that students should be charged the entire amount of the educational expenditures. It is very probable, therefore, that the trend of fees in these colleges will continue to be upward. The analysis of the relation between tuition fees and occupational earnings indicates that increases in fees must be accompanied by increases in the provision for student aid. Otherwise, many promising students will be unable to attend college. In other words, if college education under a condition of high tuition fees is to be within the reach of a large proportion of desirable prospective students, the money that the students can provide from their own resources must be supplemented by large sums from philanthropy. Amounts nominally part of the income of the college from student fees must be provided first by the college itself in the form of student aid.

Scholarships and remitted fees.— Two types of outright gifts to students are discussed: scholarships, or grants made from the income on trust funds that have been established for the specific purpose of providing financial assistance to students in the form of outright gifts; and remitted fees (sometimes termed scholarships), or grants similar to scholarships made from the general income of the college.

Scholarships and remitted fees afford a means by which the college, out of its resources from philanthropy, assumes a part of the burden which the charge for tuition imposes upon students, and thus makes possible the attendance of students who otherwise could not afford college training.

1. Only a few of the colleges have secured large trust funds specifically designated to provide scholarships. But the success of the few indicates the feasibility of securing such funds. Most of the individual trust funds are too small to yield an amount equivalent to the amount charged for tuition by the typical college.

2. Colleges usually aid many students by small grants, in preference to selecting a few of the most promising students for more ample assistance. The practice in use is influenced by the small size of the scholarship trust funds.

3. There is no uniform policy among the colleges that students must be in need before they are granted scholarships.

4. The administration of scholarships rests primarily upon the president. The task is complicated in some colleges by the existence of many donor scholarships.

5. Remitted fees are granted extensively to classes of students; selection is made rather automatically and not always with due consideration of individual qualities and needs. Such remitted fees frequently are granted to the sons and daughters of ministers and of faculty members and to ministers-in-training. High-school scholarships may be granted to students of mediocre ability, if they are the only students who choose to enroll in a given college that is pledged to grant scholarships to each of the high schools from which these students come.

6. In the typical college the total amount of scholarship grants and remitted fees, per student enrolled, is equal to 9.0 per cent of the tuition fee. The amount per grant is equal to 44.9 per cent of the fee. The number of grants is equal to 25.7 per cent of the number of students enrolled.

7. In the typical college the income from scholarship trust funds equals only 14.8 per cent of the total amount granted as scholarships and remitted fees. The large proportion not covered by income from scholarship trust funds raises the question of the justifiability of using general income for the remission of fees. In addition to the criticism on the basis of the way in which students are selected, the practice may be criticized because it lowers the total educational income per student and thus impairs the educational program. Many of the colleges which already expend an amount insufficient to provide an educational program of high quality nevertheless add more students to their enroll-

ment through remitting fees and thereby further reduce the amount per student enrolled available for educational purposes.

8. The complexity of reasons for granting scholarships and remitted fees indicates great confusion of purpose. Tradition causes remission of fees to ministerial students and to the sons and daughters of ministers. Past financial policies permit donors to select recipients. Other practices indicate a desire to increase the enrollment. High scholarship ability often seems to hold a secondary place. The small size of the grants, given to many students, indicates a desire to increase the enrollment rather than a desire to aid fully a few very promising students.

Student loans.— Although student loans have long been used as a form of student aid, they have received renewed attention since 1920. There are several reasons for this interest in loans: (1) the higher tuition fees and the greater number of students has caused an increase in the requests for student aid which the college, year after year, could not meet from the portion of its income available for student aid. Some colleges instituted systems of deferred payments of tuition; others accepted the point of view that the limited amount available for scholarship grants should be given only to the most promising students and that other students should be asked to repay money advanced to them to cover their fees. (2) Those who advocated that students should pay the full cost or a high percentage of the cost of their education also advocated that loans should be used liberally to aid the impecunious student. The publications of the Harmon Foundation contain particularly emphatic statements regarding the justice of this procedure and the value of the business training received by the student who finances his education through loans. (3) At the same time the experience of the Harmon Foundation indicated that it was possible to collect loans with only a small percentage of loss and thus demonstrated the feasibility of an extensive use of student loans. (4) During the 1920's many large foundations or funds, independent of any one college, were established for the purpose of making loans to students.

1. In the colleges studied, loans for students come from three sources. Many of the colleges, but not all, hold trust funds from which loans are granted. The Board of Education of the Methodist Episcopal Church provides more loans, and loans of larger amounts, than do the colleges. Outside agencies also provide loans; the colleges, however, have little exact information on the matter, as the loans often are made directly to students rather than through the college as an intermediary. The willingness of outside agencies to make loans to students suggests that,



by the cultivation of this source, colleges could provide more aid for their needy students.

2. Approximately one-third of the principal of all trust funds for loans is in revolving funds. If the principal of restricted funds were administered as a revolving fund with a five-year cycle, four times as many students could be granted the typical loan of \$85 as can be aided with the income on the restricted funds.

3. The present administration of loans is not conducive to the establishment of successful revolving loans, which depend for their success upon prompt payment of loans. Of the total amount of loans outstanding in the sample of six colleges, 34.3 per cent is delinquent.

4. The typical amount loaned to a student during one year is small: \$84.05 from college funds, \$104.65 from the Methodist Board of Education, \$145.00 from outside sources, or \$104.65 from all sources. In the typical situation the amount of the loan is equal to 60.4 per cent of the tuition fee. Five hundred dollars is the typical amount which a student may borrow during his entire college course. Relatively few students are aided: typically the number of loans equals 10.4 per cent of the number of students enrolled. These figures suggest that at present it would not be feasible for these colleges to follow the advice of those who advocate increasing fees and aiding students through the extensive use of loans. It would be necessary for the colleges to secure additional funds or to convert restricted funds into revolving funds and to institute a more efficient system of securing prompt payment of loans.

5. The failure to collect loans promptly may be accounted for in large part by the slack system used in granting loans, arranging for terms, and securing payments. Few colleges give consideration to items found essential to the adequate administration of loan funds by such organizations as the Harmon Foundation. The administration of loans in the colleges tends to be characterized by the placing of control in the hands of the president, deans, or various personnel officers rather than solely in the hands of the business officer, by failure to consider the prospective earning power of the student, by failure to secure an exact budget of expenses from the student, by inadequate security against losses through failure to pay the loan, by failure to charge any or sufficient interest to cover the expense of administration, by failure to arrange for regular partial payments of the loan, and by loose methods of collection coupled, in some colleges, with final dependence upon legal measures. The Harmon Foundation

plan, of which elements have been adopted by a few colleges, requires consideration of the vocational plans of the student, an exact budget of the expenses of the past and the present year, exact knowledge of all the student's financial resources, the group-guarantee plan to cover losses, interest from the date of the loan, definite arrangements for payments, understanding by the student of all terms of the loan, and various devices for impressing upon the student a sense of his responsibility for payment of the loan when due.

6. Most of the colleges use scholarships and remitted fees (outright gifts) in larger amounts than loans.

Student employment.- From one point of view, the employment of students by the college is not a form of student aid. It serves, however, to retain in college many needy students, and college administrators and students alike think of such employment as an alternative to aid by loans or by outright gifts. For this reason, employment of students by the college is included in this study.

1. Employment of students by the college is the largest single source of financial assistance to students. More money is expended by the college for student employment than for scholarships, remitted fees, or loans. Students are aided in larger amounts and in greater numbers by employment than by any other one type of assistance.

2. Some colleges tend to confuse student employment with other forms of student aid, by permitting students to live in dormitories or to secure remission of tuition fees, presumably in exchange for some work, when in reality there is insufficient work for the students to do. A careful analysis would necessitate the reclassification of much so-called student employment as primarily a subsidy to students.

3. The chief form of student employment is manual labor - work in the dining-hall or dormitory and janitorial work of various kinds. Assistantships and the managership of a bookstore - types of work with educational value - typically account for only one-third of the cases of employment.

Uncollected fees.- The failure to collect all fees when due is considered as a form of student aid. From the point of view of the student, an uncollected fee is very similar to a remitted fee (if the collection policy of the college is so lax that he is never required to pay) or to a loan (if he later pays the amount of the fee).

1. Only one college out of thirteen for which data are available settled all fees during the normal period of collection. In

all other colleges there was at least a small loss in collection, and many colleges allowed payment of fees to be deferred from the date when due until some later date during the year.

2. Uncollected fees are a relatively small amount when considered as an amount per student enrolled (\$3.26 in the typical college) and affect only a small percentage of the student body (6.4 per cent in the typical college). In twelve colleges for which data are available, however, the median amount of uncollected fees per delinquent student is \$57.28.

3. Failure to collect fees when due is condemned as a form of student aid, because of the lax business and moral training received by the student. From the point of view of the college, uncollected fees constitute a serious loss or deferment of needed income; the records of some colleges show that the accumulated total amount outstanding of uncollected fees tends to increase year by year.

Total financial assistance to students.- The types of financial assistance to students discussed in the preceding sections have all been in the form of specific grants to individual students. Another type of assistance must be added to the list, in order to complete the statement of the amount expended by the college annually in aiding students. All except two of the colleges in the group studied sustain an economic loss on their supplementary business enterprises; that is, the amount received from the operation of dormitories, dining-halls, bookstores, and a few similar enterprises is smaller than the economic cost of operating these enterprises. The college, in providing services to students at less than cost, extends an indirect type of financial assistance to students. The effect on the financing of the college is somewhat similar to the effect of remitting fees. For example, if a college sustains an average yearly loss on the operation of dormitories and dining-halls of \$25 per student enrolled, the effect over a long period of time on the financing of the college is the same as the effect of charging students the full cost of board and room, but remitting \$25 of the tuition charges each year. Although this economic loss on supplementary business enterprises cannot be allocated in specific amounts to individual students, it should be included as part of the total amount of financial assistance to students, and it can be shown as an average amount per student enrolled.

1. In only one of the colleges which operate business enterprises is there no economic loss on supplementary business enterprises. In the typical situation the loss is \$24.85 per student enrolled or the equivalent of 14.4 per cent of the fee.



2. The median of the total amounts of financial assistance to students in each of the thirty-five colleges is \$29,874.57. Scholarships and remitted fees, economic losses on supplementary business enterprises, and student employment are the three principal forms of assistance.

3. The amount of assistance per student enrolled varies in the individual colleges from as little as \$16.06 to as much as \$193.99. The median amount is \$85.05. In the typical situation the amount of assistance is equivalent to 49.5 per cent of the tuition fee.

4. An analysis of the amount expended for each type of assistance, expressed as a percentage of the total amount of assistance, shows that in the typical situation approximately one-fourth of the total amount is included in economic losses on supplementary business enterprises, one-fifth in student employment, one-sixth in loans, and one-fourth in scholarships and remitted fees.

5. The total number of grants in thirty colleges is 8,823 (exclusive of the number of students who benefit from economic losses on supplementary business enterprises, uncollected tuition accounts, and loans from outside sources). The typical situation is for the college to make 278 grants, over one-third of which are in the form of outright gifts.

6. The number of grants made is typically nearly three-fifths as large as the number of students enrolled.

The large amount expended upon the subsidization of students materially affects the degree to which the nominal tuition income is actually available for the support of the educational program. The next two sections analyze some relationships between income from students and income from other sources, expenditures, and student assistance.

Income from students in relation to income from other sources and to expenditures.— When the income from students is considered, not as the total amount due from students, but as the amount actually paid by them, it becomes clear that the published statement of fees is not a reliable index of the contribution that the student makes toward meeting the cost of his education. In the typical college, the nominal income due from fees, per student enrolled, is \$184.48; when the amount of uncollected fees and of remitted fees is deducted, the figure (income from students) becomes \$169.25; when the endowed scholarships, supplied from college trust funds, are deducted the figure is reduced to \$154.22 (adjusted income from students). But even this does not represent the amount of cash received from students that is immediately and

and wholly available for educational purposes. Expenditures are made for loans, student employment, recruiting students, and for economic loss on supplementary business enterprises. When these items are deducted, the net income from students is equivalent to only 51.4 per cent of the nominal income from students.

In the typical college the adjusted income from students is double the adjusted income from endowment but is equal to only 54.0 per cent of the total educational income. The net income from students equals only one-third of the total educational income.

In the typical situation the adjusted income from students is equal to 96.9 per cent of the instructional salaries, 56.7 per cent of the total educational expenditures, 48.4 per cent of the total annual expenditures (educational and non-educational), and 36.8 per cent of the total economic cost.

Relation of financial assistance to students to income from student fees.- In this section the amount of financial assistance is analyzed as a percentage of the income from students. Although in the typical college each of the three types of assistance (scholarships and remitted fees, loans, and student employment) is equivalent to only a small percentage of the nominal income from fees, it is equivalent to a much larger percentage of the net income from fees. Through the total financial assistance to students, the typical college provides almost half of the amount of the nominal income, or an amount equivalent to 84.8 per cent of the net income. The variation between colleges shows that some institutions provide assistance equivalent to only a small percentage of even the net income, while others provide assistance which exceeds the net income. A few colleges have no net income from students although they provide generous assistance to students.

Relation of tuition fees and of financial assistance to students to various indexes of college efficiency and excellence.- In this section an analysis is made of the relation of the efficiency and excellence of the colleges to the amount of tuition fees charged and to the various types of financial assistance given to students. The analysis shows the degree to which various practices in the administration of fees and student aid are characteristic of the educationally strong colleges in contrast to practices that are characteristic of the educationally weak colleges.

There is no one measure either of the excellence of a college as an educational institution or of the efficiency of a college as a business organization that is universally accepted among

students of education. Three measures or indexes have therefore been selected.<sup>1</sup> All of these indexes represent objective statements and hence can be used as the basis of an objective classification of colleges into groups for comparison or can be used in computing coefficients of correlation. The following summary of findings is based upon percentage distributions or coefficients or correlation.

All three measures of college excellence show that typically the larger and stronger colleges charge higher tuition fees than do the smaller and weaker colleges.

The findings with reference to financial assistance to students are summarized here in semi-tabular form, to show the characteristics of the stronger colleges, in comparison with the characteristics of the weaker colleges. Thus the notation "large" after scholarships and remitted fees in the column headed "amount per student enrolled," means that the stronger colleges tend to have larger amounts of scholarships and remitted fees, per student enrolled, than have the weaker colleges.

| Type of Assistance             | Amount per Student Enrolled | Amount per Tuition Fee | Amount per Grant | Amount per Tuition Fee | Number of Cases Expressed as a Percentage of the Number of Students Enrolled | Amount Expressed as a Percentage of Total Financial Assistance per Student Enrolled |
|--------------------------------|-----------------------------|------------------------|------------------|------------------------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Scholarships and remitted fees | Large                       | Uncertain              | Large            | Small                  | Uncertain                                                                    | Large                                                                               |
| Loans                          | Large                       | Small                  | Large            | Small                  | Uncertain                                                                    | Slightly larger                                                                     |
| Student employment             | Small                       | Small                  | Small            | Small                  | Small                                                                        | Small                                                                               |
| Uncollected fees               | Small                       | Small                  | Uncertain        | Uncertain              | Uncertain                                                                    | Small                                                                               |
| Economic losses                | Uncertain                   | Small                  | ...              | ...                    | ...                                                                          | Slightly larger                                                                     |
| Total                          | Uncertain                   | Small                  | ...              | ...                    | Small                                                                        | ...                                                                                 |

<sup>1</sup>Size, accreditation, and the average of ratings assigned to the college by three specialists.



The relation of certain financial interrelationships to college excellence.- In this section colleges of different degrees of excellence are compared with reference to some of the financial interrelationships discussed on pages 22 and 23. The same measures of college excellence are used as in the preceding section: size, accreditation, and the average of the ratings assigned to each college by three specialists in college administration. The analysis shows that the amount of income from students (nominal, adjusted, and net) is larger in the strong colleges than in the weak, and that the proportion of the nominal income that is retained as net income is much greater in the strong colleges than in the weak. The strong colleges not only make larger charges against students, but secure from the students and apply to educational purposes a larger proportion of the amount charged.

The income from students, in proportion to the income from endowment, is less in the strong colleges than in the weak colleges. The proportion of the total educational income that is derived from fees, however, is larger in the strong colleges than in the weak colleges.

When the adjusted income from students is used as a measure of the student's contribution to the cost of his education, the strong colleges secure from students a larger proportion of the amounts of instructional salaries, education expenditures, total annual expenditures, and total economic cost than do the weak colleges. Stated in other terms, the weaker colleges tend to assume the responsibility for securing through gifts and income on endowment a larger proportion of their expenditures per student enrolled than do the stronger colleges.

The proportion of the educational expenditures covered by the net income from students (the minimum statement of cash income from student fees immediately applicable to educational expenses) is much greater in the strong colleges than in the weak colleges.

Relation of financial assistance to retention of students.- The preceding two sections have been concerned with the financial policies and practices characteristic of strong colleges as contrasted with weak colleges, strength being measured in terms of financial efficiency and educational excellence. Most college administrators are interested not only in maintaining an institution of high excellence, but in retaining students until graduation.

The percentage of freshmen retained until graduation within four years is associated with the extensive use of student assistance of all types except uncollected fees, dispensed in

small amounts to a high proportion of the student body. Some of the practices that are associated with retention are in conflict with practices that are associated with college excellence. These conflicts emphasize the need for considering the practical issues involved in any change in prevailing student-aid practices.

## CHAPTER IV

### ISSUES AFFECTING THE PROPOSED "FULL-COST" TUITION FEE

The trend of the tuition fee has been upward. The recommendation has come from various sources that increases in fees should be continued until the fees equal the "full cost" of education, that is, the whole yearly educational expenditure per student enrolled. If the increases of fees continue as in the past, it is logical to assume that in time the amounts will approximate the full-cost basis. It has been generally recognized that increases in the tuition fee must be accompanied by compensating increases in the amounts granted to aid impecunious students who could not pay the higher fees; it has been suggested that the amounts of income from sources other than student fees, now used by the colleges to supplement what the student pays at the present rates, would be available under the proposed system to support the increased scale of student aid. Most of the discussion has been in the form of general statements without an analysis of the situation in specific institutions and without statistical analysis of the way in which the proposal would affect groups of colleges.

Since the practicability of the proposal depends upon the effect it would have on students, colleges, and communities, this chapter attempts the rather hazardous and hypothetical exploration of the issues that the proposal raises and of the effects that the proposal would have on the financial situation of colleges, insofar as the Methodist colleges represent a fair sampling of small American private colleges.<sup>1</sup>

In the process of setting up a hypothetical system of full-cost tuition fees, certain questions arise as to the method by which the proposed new fee, equal to the yearly educational expenditures, should be determined. Three methods are proposed, as follows:

(1) The discussions have proposed that the fee should equal the yearly educational expenditures per student enrolled. The first basis used to set the amount of the new full-cost fee

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<sup>1</sup>The discussion in this chapter is based on the fiscal year studied by the survey in each college, 1928-29 or 1929-30, and concerns the pre-depression situation.

is therefore to accept the amount of the actual educational expenditures as the new fee.

(2) The educational effectiveness of the different institutions in a group of colleges varies widely. This variation is in part the result of individual differences among institutions and in part the result of the fact that a higher expenditure per student enrolled is necessary in the very small institutions than in the large institutions to produce a given degree of effectiveness. It is assumed that each college would provide an educational program of a stated degree of effectiveness. The second basis of calculating the full-cost fee therefore involves an adjustment both for effectiveness and for size. The fee is equivalent to the amount that each college would have to spend per student enrolled to provide an educational program of "standard" effectiveness.

(3) The question arises, whether it is fair or practical to expect students to pay the excess cost in providing an educational program of standard effectiveness, caused by the small enrollment. The third basis of calculating the full-cost fee assumes that all colleges would charge a uniform fee, equal to the amount necessary to provide an educational program of standard effectiveness in the college of optimum size.

In succeeding sections are presented and discussed, for each of the three bases in turn, the amount of the full-cost fee and the number of students who could be aided from available income.

#### Tuition Fee Set at the Actual Amount of Educational Expenditures per Student Enrolled

Table I has been constructed to show the effect of the first hypothetical basis of full-cost fees. On this basis, it is assumed that the tuition fee is set at an amount equal to the present educational expenditure per student enrolled; that the colleges would maintain their present enrollment, with an increased number of students on scholarships counterbalancing the number of students, not eligible for scholarship aid, who discontinued attendance; and that colleges would continue to have the present level of income from sources other than student fees.

Table I shows the lowest, the median, and the highest amounts of the new tuition fee among thirty-four colleges. It also shows the lowest, the median, and the highest number of student-aid grants equal to the full amount of the new fee that could be granted from the various types of income available for that purpose.

The proposed new fee ranges from \$153 to \$391. The median amount is \$274. The total number of full-tuition grants that



TABLE I

FIRST BASIS: AMOUNT OF EDUCATIONAL EXPENDITURES AS PROPOSED  
 FULL COST FEE AND NUMBER OF FULL-TUITION GRANTS AVAIL-  
 ABLE FROM VARIOUS SOURCES OF INCOME, FOR  
 THIRTY-FOUR COLLEGES

|                                                                                           | Lowest<br>Amount | Median<br>Amount | Highest<br>Amount |
|-------------------------------------------------------------------------------------------|------------------|------------------|-------------------|
| Proposed new fee (the amount of educational expenditures per student enrolled)            | \$153            | \$274            | \$391             |
| Number of full-tuition grants that scholarship income would cover                         | 0                | 6.8              | 427.4             |
| Number of full-tuition grants that loans would cover                                      | 0.3              | 19.1             | 96.4              |
| Number of full-tuition grants that endowment income would cover                           | 0                | 127.7            | 559.8             |
| Number of full-tuition grants that other educational income exclusive of fees would cover | 7.2              | 84.4             | 407.1             |
| Total number of full-tuition grants that could be cared for                               | 120.5            | 239.5            | 1,192.3           |

could be made ranges from 120.5 (in a college with an enrollment of 191 students) to 1,182 (in a college with an enrollment of 1,385). In the typical situation 240 grants equal to the full tuition fee could be made.

The table assumes that all the education income, exclusive of that derived from student fees, is applicable to educational purposes and therefore could be used for student aid. At present, however, in many colleges not all educational income is applied to educational purposes. The educational income is materially larger than the educational expenditures in many colleges;<sup>2</sup> in thirteen of the thirty-four colleges the educational income exceeds the educational expenditures by an amount which is equal to more than ten per cent of the educational expenditures. In some colleges the educational income is almost double the educational

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<sup>2</sup>This statement is based upon a comparison of the educational income with the educational expenditures for each college, as given in Reeves et al., op. cit., pp. 516 and 492.

expenditures. For example, in college number 9 the educational income is \$475 and the educational expenditures are \$274 per student enrolled. In college number 12 the corresponding figures are \$464 and \$281. In a number of other colleges the educational expenditures could be increased greatly if all educational income were applied to educational purposes.<sup>3</sup>

Why, in so many colleges, is the educational income larger than the educational expenditures? Review of the items disbursed by colleges, outside of the classification "educational" expenditures, throws light on the problem. Educational expenditures exclude two classes of expenditures made by colleges: (1) non-educational expenditures, which include among other items the expenses of financial promotion, losses on supplementary business enterprises, interest on indebtedness, publicity (except the expense of the college catalog), and pensions paid from current funds (excluding regular payments to pension funds); (2) expenses which relate to economic cost rather than to educational expenditures. This class of expenditures represents such items as these: repayment of the principal of indebtedness; money spent on changes or repairs in buildings that constitute additions to capital rather than annual maintenance; and money used to provide new buildings and equipment. The use of income, which is theoretically available for educational expenditures, to meet a pressing need of one of the types listed above explains many of the instances where the educational expenditures fall below the educational income as reported by the survey staff. Under the hypothetical reorganizations assumed in this chapter these expenditures must be discontinued or provided for out of receipts not now included in the educational income. The assumption that, as part of the change in basis, a college could secure special current gifts to liquidate or carry all such pre-existing obligations is not more difficult to accept than that the tuition fee should be set at the full amount of the yearly educational expenditures. Many of these types of expenditures that are excluded from the classification of educational expenditures are related to the provision

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<sup>3</sup>On the other hand, eight of the colleges have deficits, that is, the educational expenditures exceed the educational income. The amounts by which the educational expenditures exceed the educational income range from \$17 to \$79 per student enrolled. The present discussion assumes that there would be no deficit; in other words, the new fee would be made equal to the full amount of the educational expenditures and only the income actually received would be available for student-aid grants.

of the plant. It was assumed by the advocates of full-cost tuition fees that special gifts would provide the plant.

#### Tuition Fee Set at the Amount Necessary to Provide Standard Effectiveness

The colleges studied undoubtedly vary from relatively high to relatively low levels of educational effectiveness. If students are to be asked to pay the full cost of education, it is just that they be given an education of good quality. It is assumed here that the educational quality can be measured by the educational expenditures per student enrolled. The weighted educational expenditure per student enrolled of the median college on the approved list of the Association of American Universities has been taken as the standard. It is assumed that any college with an educational expenditure per student enrolled equal to the expenditure made by the median accredited college provides an educational program of the same effectiveness as that provided by the median accredited college. It is known, however, that the size of enrollment affects the amount that must be spent per student enrolled to produce a given quality of educational program; the smaller institutions must spend more per student enrolled than the larger institutions. An adjustment must therefore be made for the size of the institution.

The weightings for size are taken from a study made by a Commission of the North Central Association of Colleges and Secondary Schools.<sup>4</sup> This study indicates that the college that has 1,051 or more students is of the optimum size and receives full value for the money spent, but that the college of one hundred students receives value equivalent to only 36 per cent of the money spent, per student enrolled; that is, the college with one hundred students would have to spend almost three times as much money per student enrolled as the college with 1,051 students, to provide the same quality of educational program.

The first step in the process of calculation was to convert the educational expenditures for each college per student enrolled into the amount that they would represent if the college were of the optimum size (1,051 or more students), by the use of the weightings adopted in 1934 by the North Central Association of Colleges and Secondary Schools. On this basis, the median amount for the accredited colleges was found: it is \$231. It is assumed

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<sup>4</sup>Commission on Institutions of Higher Education, Manual, p. XIV-5. North Central Association of Colleges and Secondary Schools, 1934 (mimeographed).

that this represents a satisfactory standard of effectiveness. For each college the amount was then calculated that the college would have to spend with its present size of enrollment, in order to make its expenditures equal in effectiveness to the expenditure of \$231 by a college of 1,051 students.<sup>5</sup>

Table II shows the lowest, median, and highest fees, when the fee is considered as equal to the standard educational expenditure, weighted for size, and the lowest, median, and highest number of full-tuition grants that could be made from income available for that purpose. The median amount of the standard expenditure, weighted for size, is \$310, or \$36 more than the median amount actually expended for educational purposes.

The increase in the expenditures necessary to produce the standard educational effectiveness can be illustrated by colleges number 3 and number 30. College number 3 actually spends \$189 per student enrolled for educational purposes. It has, however, only 227 students. In order to produce an educational program of standard effectiveness it would have to expend \$453, or almost two and one-half times the actual amount of expenditures. College number 30 has educational expenditures of \$221 per student enrolled. Its enrollment is 128. It would therefore have to expend \$578 in order to produce an educational program of standard effectiveness.

The acceptance of the standard educational expenditure, weighted for size, as the fee would change the number of student-aid grants that could be made from the income available for that purpose. The sum of all sources of income available for student-aid purposes (scholarship income, loan income, endowment income, other educational income exclusive of fees) was divided for each college by the amount of the assumed fee. The range in number of grants that could be made is from 49 to 891; the median number is 188.

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<sup>5</sup>The process may be illustrated by an example. College number 30 has an educational expenditure of \$221. Its enrollment is 122. The weighting for a college of this size is .40, that is, \$100 spent by this college has an effectiveness equivalent to the effectiveness produced by the expenditure of \$40 by the college of 1,051 students. The standard expenditure of \$231 was divided by .40 in order to secure the amount that college number 30 would have to spend to secure an educational effectiveness equivalent to the effectiveness produced by the expenditure of \$231 in a college of 1,051 students. The amount is \$578 rather than the \$221 now spent.



TABLE II

SECOND BASIS: STANDARD EDUCATIONAL EXPENDITURES (WEIGHTED FOR SIZE) PER STUDENT ENROLLED AS PROPOSED FULL-COST FEE, AND NUMBER OF FULL-TUITION GRANTS AVAILABLE FROM INCOME FOR STUDENT AID AND EDUCATIONAL INCOME EXCLUSIVE OF FEE INCOME, FOR THIRTY-FOUR COLLEGES

|                                                                                                                                                  | Lowest | Median | Highest |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|---------|
| Standard educational expenditures, weighted for size, per student enrolled, as proposed full-cost fee                                            | \$231  | \$310  | \$578   |
| Total number of full-tuition grants equivalent to full-cost fee available from student-aid income and educational income exclusive of fee-income | 49     | 188    | 891     |

Uniform Tuition Fee, with any Penalty for Size Paid  
by the College

The weightings of educational expenditures according to the size of enrollment means that in order to provide an educational program of standard effectiveness, the small college pays a penalty for size. For example, in the preceding section it was pointed out that college number 3 would have to expend \$453 and college number 30 would have to expend \$578 per student enrolled in order to reach the standard educational effectiveness, because their enrollments are 227 and 128 respectively. The college of 1,051 or more students would produce the same standard of effectiveness by the expenditure of \$231 per student enrolled. Notwithstanding the claims made by the small college of superiority in cultural training and preparation for leadership, it is doubtful whether students would be willing or should be asked to pay as tuition an amount so greatly in excess of the amount of tuition (\$231) necessary in the largest colleges to provide an educational program of the same degree of effectiveness. In order to explore this situation, a uniform tuition fee is set at \$231, the amount assumed to be necessary to provide an educational program of standard effectiveness in a college of optimum size (1,051 or more students). It is assumed that the college rather than the student would pay for the excess expenditure incurred because of the handicaps of small size of enrollment. The procedure used in making the necessary calculations follows: The difference between

the standard educational expenditures, weighted for size, and \$231 is the penalty for size per student enrolled that the college would pay. The amount of this penalty, multiplied by the number of students enrolled, represents the total penalty that each college would pay, merely because of falling below the optimum size, in order to produce the assumed standard of educational effectiveness. It is assumed that the penalty for small size would constitute a first claim on the general income of the college, exclusive of the income from fees. Thus only income (exclusive of income from fees) in excess of this penalty could be allocated to student-aid grants. Table III shows the lowest, median, and highest figures for some of these items.

TABLE III

THIRD BASIS: UNIFORM FEE, EXCESS EXPENDITURE BECAUSE OF SMALL SIZE, INCOME REMAINING AVAILABLE FOR STUDENT-AID GRANTS, AND NUMBER OF FULL-TUITION GRANTS AVAILABLE, FOR THIRTY-FOUR COLLEGES

|                                                   | Lowest               | Median | Highest |
|---------------------------------------------------|----------------------|--------|---------|
| Uniform tuition fee                               | \$231                | \$231  | \$231   |
| Excess expenditure because of small size:         |                      |        |         |
| Per student enrolled                              | 0                    | 79     | 347     |
| Total amount                                      | 0                    | 38,515 | 53,244  |
| Income remaining available for student-aid grants | -23,332 <sup>a</sup> | 29,065 | 346,415 |
| Number of full-tuition grants available           | 0                    | 126    | 453     |

<sup>a</sup>In six colleges no income remains available for student-aid grants. The negative figure shows the amount of additional income that the college would need to meet the total penalty for size.

#### A Comparison of Proposed Fees and Available Student-aid Grants on the Three Bases

Comparison of full-cost fees.- Table IV presents the actual tuition fee charged in each college and the full-cost fees proposed as calculated on the three bases. The range in the actual fees charged is from \$80 to \$300; the median amount is \$150. If the fee were set at the amount of the educational expenditures the range would be from \$153 to \$391 and the median fee would be \$274. If the fee were set at the amount that the college, at its present

TABLE IV

TUITION FEE CHARGED IN THE FISCAL YEAR THAT WAS STUDIED AND  
FULL-COST TUITION FEES ON EACH OF THREE BASES, FOR  
THIRTY FOUR COLLEGES

|                                                                                               | Lowest | Median | Highest |
|-----------------------------------------------------------------------------------------------|--------|--------|---------|
| Tuition fee charged in the year studied                                                       | \$ 80  | \$150  | \$300   |
| First basis: full-cost fee equivalent to educational expenditures                             | 153    | 274    | 391     |
| Second basis: full-cost fee equivalent to standard educational expenditures weighted for size | 231    | 310    | 578     |
| Third basis: uniform full-cost fee                                                            | 231    | 231    | 231     |

enrollment, would have to spend to provide an educational program of standard effectiveness, the range would be from \$231 to \$578 and the median fee would be \$310. If, however, the college rather than the student assumed the burden of the excess amount necessary, because of small enrollment, to provide an educational program of standard effectiveness, the fee in all the colleges would be \$231.

Table V shows the relation of the actual fee and of various types of full-cost fees to the size of the college, the type of accreditation, and the rating by three experts. For colleges of 700 or more students the median fee charged in the fiscal year in which the colleges were studied was \$175. The median full-cost fee, based on actual educational expenditures, is \$293 for these colleges, and the median full-cost fee based on the standard educational expenditures, weighted for size, is \$243. For the colleges of medium size the median actual fee charged is \$177, the median full-cost fee on the first basis is \$273, and the median full-cost fee on the second basis is \$300. For the small colleges the median fee charged is \$126, the median full-cost fee on the first basis is \$274, and the median full-cost fee on the second basis is \$399. The discrepancy between what is now charged and what would have to be charged to produce the standard quality of educational program is greatest for the small colleges. If the amount of the actual educational expenditures is accepted as the amount of the full-cost fee, it will be noted that the large colleges typically expend more than enough at present to provide the standard quality of educational program and the medium-sized colleges almost enough, but that the small colleges fall far behind in the adequacy of the amount now spent.

TABLE V

MEDIAN TUITION FEE CHARGED IN THE YEAR STUDIED AND MEDIAN  
FULL-COST FEES ON TWO BASES FOR COLLEGES OF VARIOUS  
SIZES, TYPES OF ACCREDITATION, AND RATINGS

| Type of Institution                  | Number of Colleges | Tuition Fee Charged in Fiscal Year Studied | First Basis:<br>Tuition Fee as Actual Educational Expenditure | Second Basis:<br>Tuition Fee as Standard Educational Expenditure Weighted for Size |
|--------------------------------------|--------------------|--------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------|
| Enrollment of 700 or more students   | 7                  | \$175                                      | \$293                                                         | \$243                                                                              |
| Enrollment of 400-699 students       | 13                 | 177                                        | 273                                                           | 300                                                                                |
| Enrollment of less than 400 students | 14                 | 126                                        | 274                                                           | 399                                                                                |
| A.A.U. colleges                      | 17                 | 200                                        | 294                                                           | 296                                                                                |
| Non-A.A.U. colleges                  | 17                 | 135                                        | 261                                                           | 379                                                                                |
| Rating:                              |                    |                                            |                                                               |                                                                                    |
| 6.5 to 8.6 <sup>a</sup>              | 7                  | 200                                        | 316                                                           | 257                                                                                |
| 3.9 to 6.1                           | 19                 | 165                                        | 273                                                           | 312                                                                                |
| 1.4 to 3.5                           | 8                  | 123                                        | 254                                                           | 463                                                                                |

<sup>a</sup>High ratings.

The contrast between accredited and unaccredited colleges is also significant. The accredited colleges, of course, typically expend enough money to provide the standard quality of educational program, and actually charge the students an amount equal to approximately two-thirds of the amount needed to provide the standard quality of educational program. The unaccredited colleges, however, typically fail by \$118 per student enrolled to expend enough to provide the standard quality of educational program and charge at present a fee which is equivalent to only 36 per cent of the amount necessary.

For the comparison on the basis of the ratings on excellence, the colleges were grouped into three classes, those with low ratings, those with medium ratings, and those with high ratings.



The colleges with high ratings typically expend more than enough to provide the standard quality of educational program, those with medium ratings fall somewhat below the standard, and those with low ratings fall far below.

These three comparisons of colleges on the basis of size, type of accreditation, and rating of excellence show clearly that the small and weak colleges typically charge fees which fail to approach a full-cost basis of any sort, and that the amounts they now actually apply to educational expenditures are far from sufficient to provide an educational program of standard effectiveness. Thus, even if they should charge a full-cost fee on the basis suggested in the earlier discussions of the problem (equal to the educational expenditures) they could not provide an educational program of standard effectiveness. The larger and stronger colleges, however, typically expend an amount sufficient or almost sufficient to provide an educational program of standard effectiveness; by charging a fee equivalent to the actual educational expenditures they could provide a satisfactory educational program. Moreover, the amount by which the larger and stronger colleges would have to increase present fees to reach an adequate amount is much less than the increase which the smaller and weaker colleges would have to make. This analysis indicates the financial handicap which the smaller and weaker colleges would face if they attempted the double task of improving the educational program offered until it reached standard effectiveness and, at the same time, of charging the students the full cost of education.

Number of full-tuition student-aid grants available.-

Table VI shows the lowest, median, and highest number of full-tuition grants available for each type of full-cost fee, and the lowest, median, and highest percentage when the number of grants is expressed as a percentage of the number of students enrolled. In the typical situation grants equal to the full amount of the tuition fee could be made to 240 students (52.1 per cent of the enrollment) if the tuition fee were equal to the actual educational expenditures per student; grants could be made to 188 students (42.5 per cent of the enrollment) if the tuition fee were equal to the standard educational expenditure, weighted for size; and grants could be made to 126 students (22.6 per cent of the enrollment) if the tuition fee were uniform in all colleges at \$231, with each college bearing any penalty in expenditures resulting from the size of enrollment.

When the individual colleges are examined, rather than the typical situation as shown by the medians, it is true that all students now enrolled could be granted full-tuition grants

in three colleges on the first basis, but in no college on the second or third basis. More than one-half of the students enrolled could be given full-tuition grants on the first basis in nineteen colleges, on the second basis in nine colleges, and on the third basis in six colleges. Less than one-fourth of the present number of students could be given full-tuition grants on the first basis in two colleges, on the second basis in two colleges, and on the third basis in eighteen colleges. No college would find it impossible to make some full-tuition grants on the first and second bases, but six colleges would be unable to make any such grants on the third basis.

TABLE VI

NUMBER OF STUDENTS ENROLLED, NUMBER OF FULL-TUITION GRANTS POSSIBLE ON EACH OF THREE BASES, AND NUMBER OF GRANTS EXPRESSED AS A PERCENTAGE OF NUMBER OF STUDENTS ENROLLED, FOR THIRTY-FOUR COLLEGES

|                                     | Lowest | Median | Highest |
|-------------------------------------|--------|--------|---------|
| Number of students enrolled         | 128    | 489    | 1,785   |
| Full-tuition grants on first basis  |        |        |         |
| Number                              | 121    | 240    | 1,182   |
| Percentage                          | 20.8   | 52.1   | 150.0   |
| Full-tuition grants on second basis |        |        |         |
| Number                              | 49     | 188    | 486     |
| Percentage                          | 10.8   | 42.5   | 89.0    |
| Full-tuition grants on third basis  |        |        |         |
| Number                              | 0      | 126    | 891     |
| Percentage                          | 0      | 22.6   | 78.1    |

Table VII shows the median percentage of the enrollment that could be given full-tuition grants on the three full-cost bases, with the colleges grouped according to size, type of accreditation, and the rating for excellence. According to the first basis of full-cost fees, the small colleges typically could provide a higher percentage of their students with full-tuition grants than could the medium-sized or large colleges. This situation is very largely the result of the low educational expenditure per student enrolled made by the small colleges. On the second basis of full-cost fees, the medium-sized colleges could aid a larger proportion of their students than colleges of other sizes. On the third basis, the small colleges could aid only a very small proportion of their students.

TABLE VII

MEDIAN PERCENTAGE OF THE NUMBER OF STUDENTS ENROLLED WHO COULD BE GIVEN FULL-TUITION GRANTS, ON THE THREE BASES, FOR COLLEGES OF VARIOUS SIZES, TYPES OF ACCREDITATION, AND RATINGS

| Type of Institution                  | Number of Colleges | First Basis: Tuition Fee as Actual Educational Expenditure | Second Basis: Tuition Fee as Standard Educational Expenditure Weighted for Size | Third Basis: Uniform Tuition Fee of \$231 |
|--------------------------------------|--------------------|------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------|
| Enrollment of 700 or more students   | 7                  | 42.3                                                       | 30.7                                                                            | 27.2                                      |
| Enrollment of 400-699 students       | 13                 | 55.9                                                       | 49.4                                                                            | 32.6                                      |
| Enrollment of less than 400 students | 14                 | 63.1                                                       | 42.5                                                                            | 7.8                                       |
| A.A.U. colleges                      | 17                 | 43.8                                                       | 42.3                                                                            | 22.2                                      |
| Non-A.A.U. colleges                  | 17                 | 62.8                                                       | 42.6                                                                            | 26.1                                      |
| Rating                               |                    |                                                            |                                                                                 |                                           |
| 6.5 to 8.6                           | 7                  | 43.9                                                       | 47.7                                                                            | 34.8                                      |
| 3.9 to 6.1                           | 19                 | 48.8                                                       | 41.2                                                                            | 21.0                                      |
| 1.4 to 3.5                           | 8                  | 80.2                                                       | 42.7                                                                            | 20.2                                      |

According to each basis, the unaccredited colleges typically could aid a larger proportion of their students than could the accredited colleges.

When the colleges are grouped by the rating for excellence, the colleges with very low ratings could aid a much higher percentage of their students than the colleges with higher ratings on the first basis; on the second and third bases, however, the colleges with high ratings have the advantage.

This situation in which, according to the first and second bases, the small and weak colleges could aid at least as large a proportion of their students with full-tuition grants as could the large and strong colleges suggests that the condition shown in Table V might not have as serious consequences for the small colleges as that table would indicate. On the third basis, the small

and weak colleges are heavily handicapped, according to the classification by size and rating. Most of the colleges that, on the third basis, would have no funds available for student-aid purposes are among the small and weak institutions: five of them are unaccredited, five of them have less than 400 students, and three of them are in the group with the lowest ratings.

The number and percentage of students who might be aided becomes more significant when compared with estimates of the number of students in need of aid. No exact figures are available to indicate the number or the proportion of students in need of financial assistance under the present conditions, nor the increases in need for assistance that would result from the proposed increases in fees. Two approximations to the number of students in need under the present system are presented here and a method is presented which indicates approximately the increase in need that might result because of the increases in tuition fees.

The first estimate of the number of students in need of aid is based upon the number of students who are employed by the college and in the community. It is assumed that the number of students employed during the college year approximates the number in need of aid from the college. The number of students employed as shown in Greenleaf's study Self-help for College Students was expressed as a percentage of the enrollment as given by him.<sup>6</sup> This percentage of students who are employed, multiplied by the enrollment as given in the survey reports, was used as an approximation of the number of students in need of aid. The second estimate of the number of students in need of aid is based upon the number of grants of aid given by the colleges, as shown by the present study. The grants included are scholarships, remitted fees, loans from college funds, loans by the Board of Education

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<sup>6</sup>Greenleaf's data represent a different year from the fiscal year used in this study, and the method of calculating the enrollment was not the same as was used in the survey. A few colleges were omitted for which the enrollment given by Greenleaf differed very greatly from the enrollment shown in the survey. These discrepancies may represent the inclusion by Greenleaf of students enrolled only in schools of music, extension courses, summer-school courses, and so forth, who were not included as full-time students in the survey. Greenleaf's data were available for twenty-three of the Methodist colleges. Walter J. Greenleaf, Self-help for College Students, pp. 66-74. United States Bureau of Education Bulletin No. 2. Washington: Government Printing Office, 1929.



of the Methodist Episcopal Church, and employment by the college.

Table VIII shows for each approximation of students in need of aid, the lowest, median, and highest number of students in need of aid and the lowest, median, and highest percentages when these numbers are expressed as percentages of the number of students enrolled. In the typical college the number of students

TABLE VIII

NUMBER OF STUDENTS EMPLOYED, NUMBER OF STUDENTS EMPLOYED EXPRESSED AS A PERCENTAGE OF THE NUMBER OF STUDENTS ENROLLED, NUMBER OF GRANTS OF STUDENT AID, AND NUMBER OF SUCH GRANTS EXPRESSED AS A PERCENTAGE OF THE NUMBER OF STUDENTS ENROLLED

|                                                         | Lowest | Median | Highest |
|---------------------------------------------------------|--------|--------|---------|
| Number of students employed (for twenty-three colleges) |        |        |         |
| Number                                                  | 40     | 146    | 460     |
| Percentage                                              | 13.1   | 28.7   | 96.6    |
| Grants of student aid (for twenty-nine colleges)        |        |        |         |
| Number                                                  | 47     | 234    | 1,368   |
| Percentage                                              | 18.2   | 57.1   | 114.1   |

employed equals 28.7 per cent of the number of students enrolled; in the individual colleges the proportion of employed students ranges from as low as one-sixth to virtually all the student body. The number of grants of student aid is equal to 57.1 per cent of the enrollment in the typical college; the percentages range from 18.2 per cent to 114.1 per cent in the individual colleges. Although there is some overlapping, this total number of grants approximates the number of different students who receive aid from the college.<sup>7</sup>

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<sup>7</sup>An analysis which gives some indication of the degree of the shrinkage when the number of grants is reduced to the number of different individuals aided follows. It was possible to secure more voluminous data in the colleges visited early in the course of the survey than in those visited later. For nine colleges the results are available from the analysis of alphabetical cards, each showing the aid received by an individual student from all types of aid. The cards were posted from separate lists for each type of aid, such as remitted fees, or loans from college

An approximation to the proportion of students who would need aid under increased tuition fees<sup>8</sup> is attempted in Figures 1 through 4. The data used are those on the alphabetical cards for nine colleges, described in footnote 7, page 41. For each college the data from the cards were tabulated to show the total amount of aid granted to each student. This amount of aid was subtracted from the amount of the tuition fee of that college, to give the amount paid by each student, unaided, to the college.<sup>9</sup>

funds. The types of aid included on the cards are not completely uniform from college to college, as the cards for a given college include entries from all lists that the college provided. In addition to the four forms of aid (exclusive of employment by the college) included in Table VIII in some colleges loans from outside loan funds and uncollected tuition fees are included. These represent relatively few additions to the number of cards. On the other hand, employment was never listed, although it is included in the total number of grants shown in Table VIII.

The degree to which the total number of grants shown in Table VIII is an overstatement of the total number of different students who received aid was roughly checked by the following calculations. These calculations are based upon eight colleges, as the number of grants of student aid was not available for one of the nine colleges for which an analysis of the alphabetical cards was available. The number of grants of employment was deducted from the number of grants shown in Table VIII, for each of the eight colleges. The number of different students receiving aid as shown by the alphabetical cards was expressed as a percentage of the number of grants (exclusive of employment). These percentages range from 69.3 per cent to 113.6 per cent in the individual colleges. The total number of different students receiving aid constitute 92.1 per cent of the total number of grants. In other words, the shrinkage that occurs when the number of grants is reduced to the number of different students actually aided is approximately 8 per cent.

<sup>8</sup>For the original suggestion of the method used the writer is indebted to Professor John Dale Russell of the University of Chicago.

<sup>9</sup>The number of different students aided (1,219 in nine colleges) was subtracted from the enrollment (4,333 in nine colleges). The difference (3,114) represents students who paid the full amount of the tuition fee themselves. Note that the amounts on the cards do not include employment.

For each college these numbers of students who themselves paid different amounts of the tuition fee were arranged according to the increasing amounts paid. The cumulative number of students unable to pay more than the amount indicated was secured at each amount and was reduced to a percentage of the number of students enrolled. These percentages were then plotted as a percentile curve. Figures 1, 2, and 3 are presented as examples; they represent the colleges with the lowest, the median, and the highest percentages of students paying the full amount of the tuition fee unaided. Figure 4 shows the percentile curve for all students in the nine colleges.<sup>10</sup>

In the figures, the hatched area represents the amount of financial assistance provided the students; the area not hatched represents the amount of actual revenue received by the college from the students themselves.<sup>11</sup>

By projecting the trend line above the ordinate of the present tuition fee, it is possible to secure a prediction as to the increased number of students who would require aid if the tuition fee were increased by any given amount. This prediction assumes that if the college increased its fee it would maintain the same enrollment and that the students would represent the same distribution of ability to pay as at present. Inspection of the ten figures shows no single form of curve that is characteristic of all nine colleges. The simplest trend line is a straight line drawn from the zero point to the intersection of the percentile curve with the ordinate of the present tuition rate; this line is the diagonal of the portion of the figure representing the students who were aided. In each case this line is approximately parallel with the portion of the percentile curve that represents the students who were aided, but who did not receive more than the full tuition fee.

When the trend lines are extended upward (indicated by

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<sup>10</sup>The construction of Figure 4 was complicated by the fact that, since there is no single, uniform tuition fee, the upper boundary of the hatched area is not a straight line. The height of each section of the boundary line represents the amount of the tuition fee of one college; the length of each portion is equivalent to the proportion that the enrollment of that college constitutes of the total enrollment in the nine colleges.

<sup>11</sup>Some of the students (155 in nine colleges) received sums greater than the tuition fee; their ability to pay fees is represented by minus numbers.

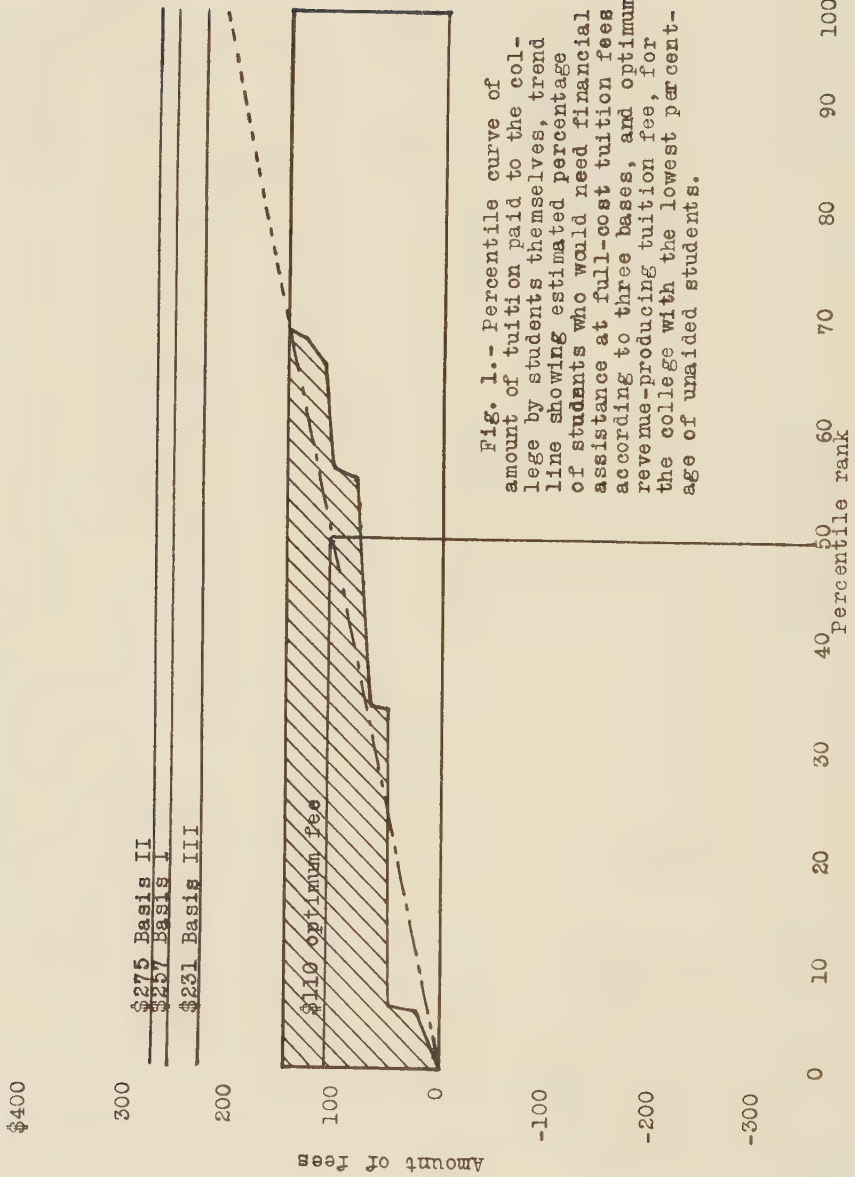


Fig. 1.- Percentile curve of amount of tuition paid to the college by students themselves, trend line showing estimated percentage of students who would need financial assistance at full-cost tuition fees according to three bases, and optimum revenue-producing tuition fee, for the college with the lowest percentage of unaided students.



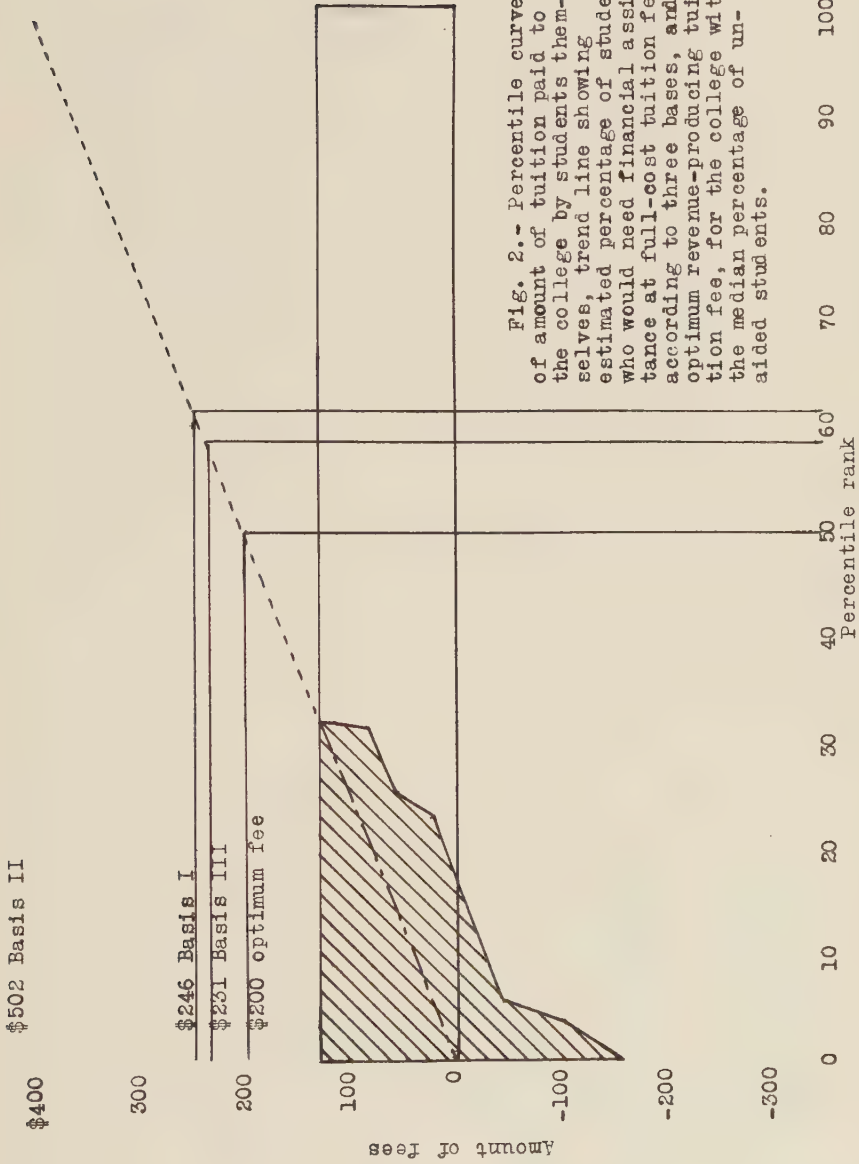


Fig. 2.- Percentile curve of amount of tuition paid to the college by students themselves, trend line showing estimated percentage of students who would need financial assistance at full-cost tuition fees according to three bases, and optimum revenue-producing tuition fee, for the college with the median percentage of unaided students.

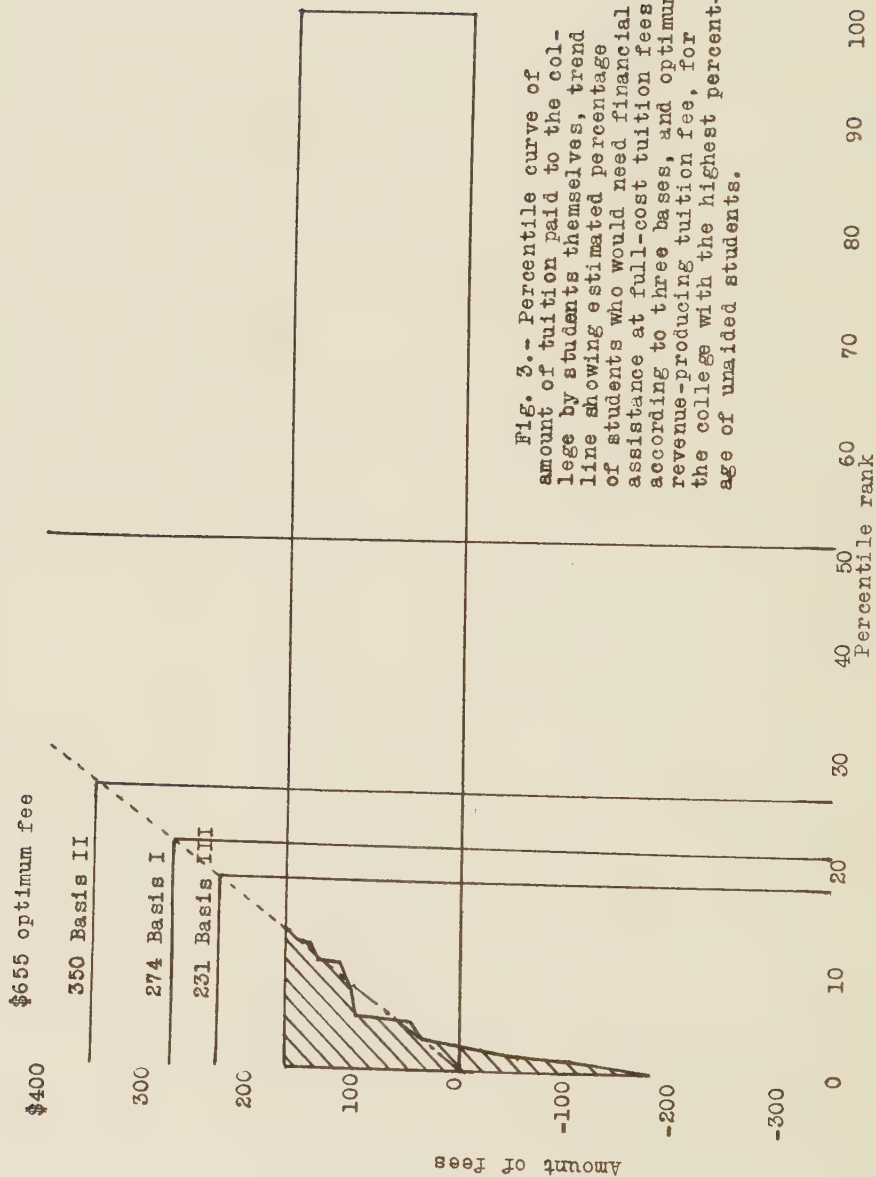


Fig. 3.- Percentile curve of amount of tuition paid to the college by students themselves, trend line showing estimated percentage of students who would need financial assistance at full-cost tuition fees according to three bases, and optimum revenue-producing tuition fee, for the college with the highest percentage of unaided students.

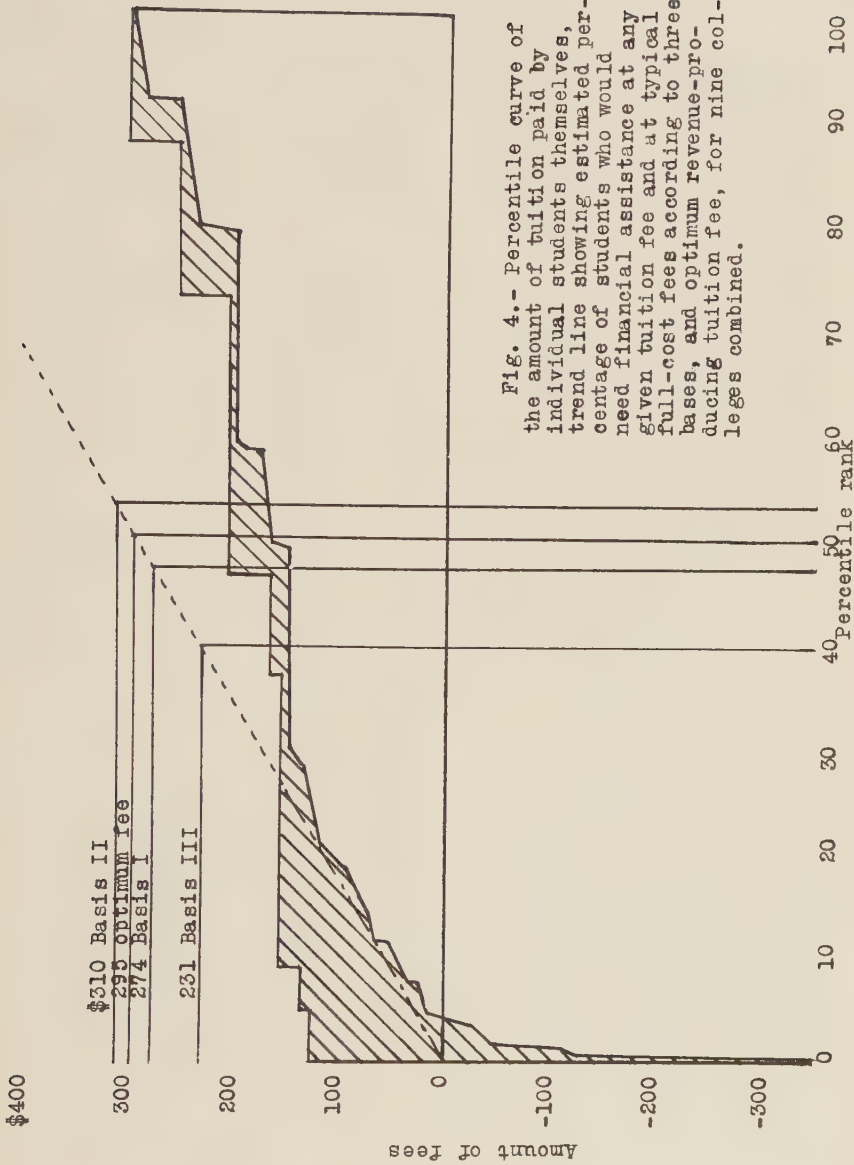


Fig. 4.- Percentile curve of the amount of tuition paid by individual students themselves, trend line showing estimated percentage of students who would need financial assistance at any given tuition fee and at typical full-cost fees according to three bases, and optimum revenue-producing tuition fee, for nine colleges combined.

dotted lines in the figures) they indicate the increasing percentage of students who would require aid at each increasing rate of tuition.<sup>12</sup> With the tuition fee fixed according to the first basis (the actual educational expenditures per student enrolled) the percentage of the students who would require aid ranges in the nine colleges from 15 to 100<sup>13</sup> per cent; the median percentage is 39. With the tuition fee set according to the second base (the amount necessary to provide an educational program of standard effectiveness), the percentage of students who would require aid ranges from 12 to 100<sup>14</sup> per cent; the median percentage is 33. With the fee set according to the third base (a uniform fee of \$231 in all colleges) the percentage of the students who would require aid ranges from 12 to 100<sup>15</sup> per cent; the median percentage is 26.

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<sup>12</sup>As the tuition fee is increased, the proportion of students able to pay the fee themselves tends to decrease; a point will be reached beyond which the amount of assistance to be provided increases more rapidly than the actual net revenue to the college. This might be considered the optimum point for increasing fees and it may be represented by the intersection of the trend line with the abscissa of the fiftieth percentile. To illustrate, if an additional increase of \$10 in fees (represented by a horizontal row of squares on the chart) is then made, more than 50 per cent of the students must have this amount of increase provided them through the college; from less than 50 per cent will the increase represent a real addition to the total revenue of the college. In other words, the increased subsidies necessary will be greater than the net increase in revenue to the college; of the increase in the nominal tuition revenue more than half must be provided by the college itself.

From the nine colleges for which figures were constructed it can be calculated that the optimum maximum fee would range from \$110 to over \$1,000; in the college typical of the nine (college number 11) it is \$455. It should be noted that in one college the tuition fee of \$150 is already above the optimum maximum according to this hypothesis; that is, already 69.3 per cent, or more than half, of the students receive assistance. In two other colleges the existing fee approximates the optimum maximum, with 48.7 per cent and 46.7 per cent of the students respectively receiving aid according to the data on the alphabetical cards.

<sup>13</sup>Two colleges.    <sup>14</sup>Three colleges.    <sup>15</sup>One college.



In Figure 4 the three horizontal lines represent the three hypothetical full-cost tuition rates, proposed under the first, second, and third bases for the institution typical of the thirty-five colleges. The intersection of these horizontal lines with the trend line<sup>16</sup> indicates that, with tuition fees of \$274, \$310, and \$231, the number of students to be aided would be respectively 47, 53, and 40 per cent of the enrollment.

The percentage of the number of students enrolled that could be granted full-tuition student-aid grants from the present resources of the college was shown in Table VI for each of the three bases of full-cost fees. In Table IX these percentages are repeated and contrasted with the estimates of the percentage of students enrolled that would need aid under the proposed reorganization. The table is based upon the median figures and hence represents the typical situation. On the first basis (full-cost fee set at the actual educational expenditures) 52.1 per cent of the number of students enrolled could be given full-tuition student-aid grants of \$274. By the four estimates, 28.7 per cent, 57.1 per cent, 39 per cent, and 47 per cent of the number of students enrolled would need assistance. The number of grants of aid available constitutes respectively 181.5 per cent, 91.2 per cent, 133.6 per cent, and 110.8 per cent of the number of cases of need as estimated by each of the four methods. The average of these percentages, or "average index" of the adequacy of student-aid funds to supply needy students with assistance, is 129.3 per cent. On the second basis of calculating full-cost fees, full-tuition grants could be provided for 107.9 per cent of the estimated number of needy students (the average of 148.1 per cent, 74.4 per cent, 128.8 per cent, and 80.2 per cent, according to the four estimates of need); on the third basis, grants could be made to 65.4 per cent of the estimated number of needy students (the average of 78.7 per cent, 39.6 per cent, 86.9 per cent, and 56.5 per cent).

The previous tables were intentionally developed by methods that present a conservative picture of the proportion of the enrollment for which the present resources of the college could provide financial assistance. In actual practice, the number of

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<sup>16</sup>In this figure, as there is no common tuition rate, it is impossible to draw the trend line as was done in the previous figures. Here the trend line was drawn from inspection, from the origin approximately parallel to the part of the percentile curve lying between the ordinates representing 0 and \$120, the lowest tuition fee of any of the nine colleges.

TABLE IX

SUMMARY, FOR THE THREE BASES OF FULL-COST TUITION FEES, OF THE AMOUNT OF THE FEE, THE PERCENTAGE OF STUDENTS ENROLLED WHO COULD BE GRANTED FULL-TUITION STUDENT-AID GRANTS, THE PERCENTAGE OF STUDENTS ENROLLED WHO ARE ESTIMATED TO NEED AID, AND THE PERCENTAGE OF CASES OF NEED THAT COULD BE PROVIDED FOR BY AVAILABLE RESOURCES

|                                                                                                                | Full-cost Tuition Fee |              |             |
|----------------------------------------------------------------------------------------------------------------|-----------------------|--------------|-------------|
|                                                                                                                | First Basis           | Second Basis | Third Basis |
| 1. Median amount of proposed full-cost tuition fee                                                             | \$274                 | \$310        | \$231       |
| 2. Median percentage of students enrolled who could be provided with full-tuition grants                       | 52.1                  | 42.5         | 22.6        |
| 3. Median percentage of students in need of aid (Greenleaf)                                                    | 28.7                  | 28.7         | 28.7        |
| 4. Index of adequacy <sup>a</sup>                                                                              | 181.5                 | 148.1        | 78.7        |
| 5. Median percentage of students in need of aid (present number of grants)                                     | 57.1                  | 57.1         | 57.1        |
| 6. Index of adequacy <sup>a</sup>                                                                              | 91.2                  | 74.4         | 39.6        |
| 7. Median percentage of students in need of aid, according to projected curve, for nine colleges <sup>b</sup>  | 39                    | 33           | 26          |
| 8. Index of adequacy <sup>a</sup>                                                                              | 133.6                 | 128.8        | 86.9        |
| 9. Percentage of students in need of aid, according to projected curve for nine colleges combined <sup>c</sup> | 47                    | 53           | 40          |
| 10. Index of adequacy <sup>a</sup>                                                                             | 110.8                 | 80.2         | 56.5        |
| 11. Average of four indexes of adequacy <sup>d</sup>                                                           | 129.3                 | 107.9        | 65.4        |

<sup>a</sup>Number of full-tuition student-aid grants available expressed as a percentage of the estimated number of cases of need.

<sup>b</sup>From figures for nine colleges.

<sup>c</sup>From Figure 4.

<sup>d</sup>The average of the figures in lines 4, 6, 8, and 10.

grants would tend to be larger than the number shown in the tables because of four possibilities.

1. The available student aid is shown as unit grants of

the full amount of the assumed tuition fee. At present, the colleges choose to grant many small amounts, in preference to a lesser number of full-tuition grants. Insofar as this policy of using grants smaller than the amount of the tuition fee were followed by colleges on the reorganized basis, the number of grants (and the proportion of the number of students enrolled who could receive grants) would be correspondingly increased. An example will make this clearer. If, instead of giving one hundred students unit grants equal to the tuition fee, a college chose to give the same amount in the form of fifty grants equal to the full tuition fee, fifty grants equal to two-thirds of the fee, and fifty grants equal to one-third of the fee, the number of students aided would be increased by one-half.

2. The discussion has not taken account of the possibility that a large part of each student-aid grant could be made in the form of a loan (from additional revolving funds) rather than in the form of an outright gift from the yearly income of the college. For example, it would be possible for one-half of the typical student-aid grant to be a loan and the other half to be an outright gift.<sup>17</sup> It was assumed in the tables that the entire educational expenditure would be covered by receipts from the new full-cost fees; as a result the entire present educational income (exclusive of income from tuition fees) would be distributed as student-aid grants and would appear in the accounts as income from student fees. If only one-half of the grant (representing the outright gift) need be supplied from this income available for student aid, full-tuition grants could be made to approximately twice as many students as the numbers shown in the tables.<sup>18</sup> This increase would be possible only after a transitional period during which an adequate revolving loan fund was being accumulated. During

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<sup>17</sup>The same effect would be secured if half of the students aided received full-tuition scholarships and half of the students aided received loans equal to the full amount of the tuition fee.

<sup>18</sup>Restricted income (income from trust funds for scholarships and from the investment of restricted loan funds, and the available cash of previous revolving loan funds) and funds received from the Board of Education of the Methodist Episcopal Church would necessarily be used for the purpose designated by the donor. The typical situation, however, is for the resources of a college to be able to supply 240 full-tuition grants; of these only 6.8 grants represent income restricted to use for scholarships and only 19.1 grants represent receipts restricted to loans.

this period it would be necessary for a college to supply from its general resources the money for the loan portion of the student-aid grants (in excess of the amount available from regular college, denominational, or other loan funds), in the same way that the general resources of the colleges are now used to provide student-aid grants in the form of remitted fees. If the college could collect loan payments effectively and if the losses did not exceed the interest collected on the loans a revolving loan fund could be built up in a few years that would provide all of that portion of the student-aid grants which consists of loans. The tables indicate the amount that the college could disburse annually as student-aid grants; during the transitional period almost half of this disbursement would not be an expense, but would be a diversion of income to the creation of a permanent capital asset, the new revolving loan fund. After the transitional period, during which the capital of the revolving loan fund had been built up, a given amount from the general resources of the college would thus make possible full-tuition grants to twice as many students. Insofar as the college was able to endorse the student notes and discount them at banks, the number of grants could be increased immediately without waiting through a period during which the loan fund capital was being accumulated from annual income.

3. The amount available for student aid used in this chapter excludes the present expenditures for the employment of students by the college. Under any of the proposed plans of reorganization, the equivalent of such present expenditures would still be available to assist students in providing their tuition fees, or their personal expenses and maintenance, in addition to the amounts shown in the tables.

4. The existing economic losses on the operation of supplementary business enterprises were discussed on page 21. The discussion on this point in the published survey report implies the desirability of gradually increasing the charges for these services until economic losses in the operation of the services are eliminated.<sup>19</sup> On that basis, which represents somewhat the same point of view as the proposals for the adoption of a full-cost basis for tuition fees, each college would have available annually an operating surplus from its supplementary business activities. Part of this operating surplus would represent interest on the full amount of the capital expended in providing the plant and equipment for the enterprise, and part would represent

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<sup>19</sup>Reeves et al., op. cit., pp. 508-11; but also see pp. 527-28.



the annual amount of depreciation of this plant and equipment. The first sum could logically be used to provide additional student aid grants in excess of the number shown in the tables, or to provide students, already receiving grants equivalent to the amount of the tuition fee, with supplementary grants covering all or part of the charge for board and room. The amount equal to the annual amount of depreciation would become available for further student aid if colleges chose to follow the present practice, and expected to provide new dormitories and dining halls, as the old ones become worn out, from new gifts for the purpose rather than to set up reserve accounts to replace obsolete buildings out of their accrued earnings.

These four ways of increasing the number of students who could be assisted do not conflict with each other and could be used simultaneously. In view of the above analysis, it seems possible to predict that colleges in general (that is, as judged from the typical situation shown by the medians) could provide from their present resources more than enough grants of financial assistance on the first or second suggested basis of reorganization and could approximate the number of grants needed on the third basis.

#### Issues that Affect the Policy of Full-cost Fees

Several issues emerge when the suggestion is considered that the tuition fee be made equal to the full-cost of education. The more important of these issues will be discussed briefly.

Relation of full-cost fees to number and type of students who enroll.- Would colleges be able to secure enough students to maintain their present enrollments? According to the first basis of calculating the full-cost fee, the larger and stronger colleges are handicapped, as their educational expenditures per student enrolled are larger than the expenditures made by the small and weak colleges. When the reorganization proposed involves raising each institution to a given level of educational effectiveness, however, as on the second basis, the smaller and weaker colleges are handicapped as the full-cost fee necessary to meet their expenditures is much higher than the fee necessary in the larger colleges. On the third basis the fee is the same for all colleges, but the small and weak colleges are handicapped in the amount remaining available for student-aid purposes. It seems probable, therefore, that if full-cost fees were set by the first basis, the large colleges might find the normal increase in enrollment curtailed. The medium-sized colleges and the small colleges spend almost the same amount per student enrolled for educational pur-

poses, although the medium-sized colleges are able to produce a more effective educational program than the small colleges. It seems probable, therefore, that students would elect to attend medium-sized colleges rather than the very small colleges, since the fee would be the same and the educational program would be stronger. Therefore, the very small colleges as well as the very large ones might lose in enrollment, while the medium-sized colleges would tend to gain.

On the other hand, all the private colleges might find their enrollments curtailed or decreased, as the amount of the increase over the present fee necessary to attain a full-cost fee of any sort is large. Students unable to pay the high fees might tend to go to tax-supported institutions.

In some parts of the country the attempt to charge full-cost fees might result in a general tendency for high school graduates not to attend college. As a rule students do not go great distances to attend college. Typically, the private colleges draw from an area with a radius of less than fifty miles. If, in a given community, the college charges a higher fee than the students can or will pay, the students may not enroll in the college. Theoretically, the state university or state normal schools would be available to them. However, attendance at state institutions also tends to be more or less local. Thus students who were residents of a part of the state remote from any state institution and who were unable to pay the high fees of the local private college might tend not to enter college at all.

It seems probable that the present trend toward socioeconomic selection of students would be increased by higher fees, and that, if the colleges with the higher levels of fees wished to avoid becoming "rich men's" colleges they would find it necessary to make a careful selection of students and to aid many who could not otherwise attend.

Certain influences would tend to counterbalance the effect of the high fees. Colleges with prestige are able at present to obtain all the students they are equipped to care for, although their fees are higher than the fees of other colleges. Colleges can depend upon a certain local constituency, as it is less expensive for a student to attend a college whose location permits him to live at home than to attend a college, with lower fees, at a distance from his home. Local, family, and denominational loyalty may cause a student to attend a certain college, even though attendance may entail great financial sacrifice on the part of the student and his family.

Special difficulties of the smaller colleges.— How could

colleges, especially the smaller colleges, adjust themselves to the situation brought about by full-cost fees without going out of existence? This question involves two elements: the quality of the educational program offered and the fact that the size of the institution modifies the effectiveness of a given expenditure per student enrolled. Many small colleges exist now because they do not expend much per student enrolled; therefore they are able to maintain fees at a low level. To improve the educational program would entail an almost exorbitant expenditure, per student enrolled, and an almost exorbitant full-cost fee. How could the small college provide an effective educational program and at the same time restrict the educational expenditure (and the full-cost fee) per student enrolled? There are several possible solutions to the problem.

The college might reorganize as a junior college. According to the report of the North Central Association of Colleges and Secondary Schools, junior colleges, because of their restricted program, are able to provide a more effective education for a given amount of money than the four-year colleges of equal size can provide. Therefore, the junior college could provide a standard quality of educational program with a lower expenditure per student (and a lower full-cost fee) than the four-year college of the same size. Many of the smaller and weaker four-year colleges are almost in the junior college class so far as the classification of their students is concerned. Nevertheless, these colleges provide the variety of courses, the laboratory facilities, and the specially trained faculty necessary in order that the small group of upper-classmen may complete their work.

The colleges might try to increase the enrollment to the point where the present expenditure per student would provide an adequate educational program. It seems doubtful whether many colleges would succeed with this attempt. Colleges have been attempting to build up their enrollments and, even before the depression checked the increases, many colleges remained small. Moreover, the great increase which would be necessary in some colleges would entail larger buildings and this in turn would involve the college in a money-raising campaign.

Other methods apparently must be found to strengthen the weaker colleges, if they are to remain as four-year institutions under a policy of full-cost tuition fees. One such method would be the use of equalization funds by the church boards or philanthropic foundations. During the transitional period of reorganizing on the basis of full-cost fees, the small college would have to charge abnormally high fees to achieve a full-cost fee basis

and at the same time provide an educational program of standard effectiveness. If, for example, the church board were to apportion its funds and influence philanthropic foundations to apportion their gifts to colleges in accordance with the needs of the colleges, the small colleges might be enabled to improve their educational program, to enlarge their plants, and to increase the amount of their funds for student aid. They would then be justified in gradually increasing their fees to a full-cost basis. At the same time, as the strength and prestige of the college grew its enrollment should increase. The larger enrollment would decrease the amount of expenditures per student enrolled that would be necessary in order to provide an educational program of a given degree of effectiveness. It should therefore not be necessary for fees to be increased to the very high amounts shown in Table V and in time the philanthropic funds would not be needed, except for student-aid purposes.

One element in the present type of college organization that increases the cost per student is the attempt of each small college to provide a large variety of departments and courses from which students may choose. This effort to match the curriculum of the very large college or the university necessitates elaborate facilities and professors who are specialists in their fields, although students who elect to major in any given field may be very few in number. In other words, apparently a weakness of the small institutions lies in the fact that they have so many departments, or offer so many major and minor sequences, that the number of students selecting any one of these departments or sequences is too small to provide income adequate to support a normal salary for that level of specialized teaching. In trying to do too many things, the college spreads its available funds so thin that resources do not permit any one thing to be done with normal effectiveness. The weightings of the North Central Association are in part a reflection of this over-extension of curricular offerings. According to these weightings the expenditure for educational purposes of \$100 in a college of two hundred students is considered equivalent to an expenditure of only \$40 in an institution of 1,100 students.

It is noteworthy that the North Central Association report has a favorable weighting for the expenditures in junior colleges. For example, an expenditure of \$100 in a junior college is considered equivalent to an expenditure of \$178 in a four-year college of the same size of enrollment. The weightings for size are only statistical summarizations of the results found by analyzing data from a sampling of colleges operating under prevailing



policies; they are reflections of the ineffectiveness under present policies of the dollar expenditure of the small institution. If the weightings were again calculated after a period of years during which practices changed, the weightings would change correspondingly.

If the small colleges were reorganized in such a way as to make their expenditures more effective, their handicap, as shown by the weightings, should diminish. The present superior effectiveness of the expenditures made by the junior colleges seems to be related to the fact that the junior colleges restrict their curricular offerings, carry few small classes, and provide relatively few special and vocationally directed courses that appeal to a group of students too small to afford normal financial support to the courses given. A similar effectiveness in expenditures might also be secured by a small four-year college through similar limitation of the number of courses offered. The coordination of curriculums is a possible solution. Major sequences, usually elected by only one or two students in each graduating class, could be withdrawn by all except one of the colleges in a cooperating group; the small number of students who desired a major sequence not offered by the local college could be encouraged to transfer to the other colleges of the group where that particular sequence was offered. It would be possible by such curricular readjustment for a small college to secure an effectiveness from its expenditures for instruction much more favorable than would be indicated by the existing weighting for its size.

Another handicap of the very small college is the relative ineffectiveness of a given unit of expenditure for administrative purposes. In order to secure a person of a given degree of competence, the salary of a president, dean, dean of women, librarian, college physician, nurse, dietitian, business manager, superintendent of buildings and grounds, financial agent, publicity man, recruiting officer, director of athletics, or coach would have to be as large in an institution of three hundred students as in one of fifteen hundred students; but the amount expended for the purpose per student enrolled would be five times as large in the smaller institution. Similarly, the amount of money necessary to provide and maintain an auditorium, a gymnasium, a swimming pool, or an athletic field is not very closely related to the size of enrollment.

This handicap, the relative ineffectiveness of a given unit expenditure in a small institution, has led to frequent discussion of mergers or coordination as the way out of the difficulties of

the small college. The average expenditure per student found in each of three relatively ineffective small colleges, each with three hundred students, would yield results of greater effectiveness if the nine hundred students could be concentrated on a single campus, that is, if the institutions could be consolidated.<sup>20</sup> The practical difficulty would be the sentimental reluctance to "extinguish" two of the colleges, the almost total loss of the nominal value of the plant and equipment on the two campuses abandoned, and the difficulty in providing funds for the expansion in plant and equipment necessary on the third campus where the merged institutions were located.

Part of the advantage of a merger might be secured by administrative consolidation or coordination. While there has been much discussion of consolidation and coordination, relatively few examples of steps in this direction can be found. Such examples as exist are only rarely of partial consolidation or coordination of small colleges. Nevertheless, from a theoretical standpoint the way seems promising. At the same average expenditure per student a higher price might be paid and a much higher type of service secured for the specialized leadership necessary, by consolidation of at least the administrative activities of a group of colleges. Handling of investments, auditing, bookkeeping and purchasing, publicity, recruiting, and general administration could be carried on for a group of colleges from a single center or could be directed by a single officer with relatively inexpensive part-time assistants on each campus. It might be possible to devise similar economies along other lines. At a low cost per student, one highly-paid person might set the policies of the libraries, with inexpensive assistants carrying on the detailed work in each library. One head of the federated department of physics, of high competence, might serve the group, with inexpensive instructors on each of the other campuses.

Any method or combination of methods that would improve the quality of education offered by the small colleges and thus increase the enrollment, or that would secure more effective results for a given expenditure per student enrolled would increase the probability that the small college could charge fees equal to the full cost of education and still survive.

Problems involved in the student-aid program.- How could

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<sup>20</sup>According to the report of the North Central Association, the weighting assigned to a given expenditure in a college of three hundred students is .57 and to the same expenditure in a college of nine hundred students .95.

the student-aid program be most effectively adjusted to the basis of full-cost fees? Table IX shows that in most of the colleges the funds available for student-aid purposes would be adequate to the need, with full-cost fees. On the full-cost fee basis the college, if it granted to a student a full-tuition scholarship, would be singling that student out for special distinction to a degree not true under the present system, which subsidizes all students to a certain extent. As part of a reorganization on a full-cost basis, a reorganization of the student-aid system seems advisable.

One issue that must be met is the selection of bases for allocating student aid to individual applicants. Present experience seems to provide relatively little guidance, as no generally accepted basis, nor well-substantiated theory, seems to govern the present administration of student aid by colleges. As the purposes back of the specific student-aid procedures in a college are so rarely stated explicitly in its publications and usually have not been carefully formulated nor formally adopted, present student-aid procedures seem confusing and unsystematic. A clear-cut formulation of the purposes of a college in granting student aid, or rather of the relative importance of each of the purposes that might be achieved, seems the first step in setting up a fully defensible system.

Certain principles may be accepted tentatively. (1) The first duty of a college is to provide an adequate quality of education to its normal student body; only funds in excess of the expenditures necessary to meet this standard can properly be allocated to student aid. (2) The college "should see the student through." If the college commences to aid a particular student it should so far as possible complete the task and should prevent his being forced to leave college before graduation for financial reasons alone. (3) Student aid expenditures should be truthfully and realistically stated. Expenditures actually made as part of the process of recruiting should not be confused with expenditures to aid particularly promising and needy students; grants intended as aid should be clearly distinguished from payment for efficient and necessary services to the college. Loans should be on a business-like basis; only the loans that it proves impossible to collect represent any real expenditure by the college for student aid. (4) Recipients of student aid should be selected on the merits of their individual cases, not by automatic grants to types or classes of students. The selection of the recipients will be the most realistic revelation of the actual purposes motivating the student-aid practices of a college.

Such principles as the above form a basis for the discussion of the administration of student aid and, more specifically, the selection of recipients. To most of the problems involved, no final solution can be given at this time nor can one be visualized which would apply to all colleges alike. As purposes are different, so resulting procedures should be different. Diversity among colleges will presumably lead to varying purposes and practices in dealing with each problem.

Should student aid of a given amount be distributed among many or few students? Is the function of student aid only to make possible the attendance of students who lack a few dollars of the cost of attendance, or should the college aim to aid a smaller number, each almost wholly unable to provide money from personal or family resources, to whom will be granted the relatively large amounts needed to make attendance possible? Is the student-aid program to be favorable to the requests of students living in the college dormitories or will it be favorable to the students who reside in their own homes in the college town? If the former policy is followed, should aid to the extent of tuition be supplemented to provide part of the expense of food, room rent, and travel? These problems can be symbolized by the question: How should the grants of a college be distributed by size; what relation should exist among the number of grants of less than the amount of the tuition fee, grants equal to this amount, and grants of more than the amount of the fee? In the past colleges have emphasized the smaller grants. The program at DePauw University illustrates the emphasis on full-tuition grants. The Rhodes scholarships at Oxford University illustrate the use of grants sufficiently ample to provide tuition and full maintenance. The assumption in most colleges has been that if the college supplements the student's private resources so that he can pay his fees, any money lacking to provide maintenance can be secured by part-time employment. There is a tendency in some institutions to regard employment with little favor on the ground that the normal academic load is so heavy that no time and strength can wisely be diverted to other tasks unless the student is willing to prolong his period of residence. It is an open question whether the virtues of working one's way through college have not been overstated and whether colleges might not wisely, even at the price of aiding fewer students, shape their student-aid policies in the direction of granting subsidies to cover charges for maintenance as well as tuition fees to the most promising students, in order that they could devote their entire time and energy to academic work.

Another problem is the subdivision of the total student



aid granted an individual into portions to be respectively outright gifts, loans, and employment. Various conditions underlying this problem have been discussed in a previous chapter. Since a gift or appropriation of \$10,000 a year would serve many more students if used to develop a revolving loan fund than if applied to remitted fees, the advantage of a greater emphasis upon loans than upon outright gifts is obvious. Yet the practicability of placing major dependence on loan funds has not been demonstrated. Most of the writing on the subject was done when jobs were plentiful and well-paid for the students who were leaving college. Since the onset of the depression the burden of debt seems more serious to adolescents. If interest is charged from the date the loan is made, the burden is serious; if interest is not charged, the increase in the principal of the fund is less likely to balance losses resulting from the failure of students to pay their loans. Plans requiring attendance at graduate and professional schools would extend greatly the period of borrowing for many of the more promising students. Presumably loans are most defensible when granted to students who will, within two or three years, be gainfully employed in occupations yielding a fairly large income. In granting student aid to freshmen and some pre-professional students the use of a large proportion in the form of loans seems less desirable than in the cases of other types of students. Employment should be carefully considered so that it yields as much as possible in the way of educational by-products and so that the student does not damage his academic performance by diverting undue time and strength to earning money.

Another point at issue is the basis upon which students to be aided will be selected from the large number of potential college candidates most of whom will never be enabled to enroll in college, or selected from among the mass of college students some of whom cannot be aided because of lack of sufficient funds to meet all requests. In general, three classes of qualifications for aid seem important in practice: characteristics of academic promise, of financial need, and of outstanding promise in later life either of general service to the community or of special vocational service. Too little is known concerning our present ability to predict accurately, from any particular index of academic promise, either future academic success or community service. Statements of the degree to which high averages in college or high-school marks or high intelligence test scores should determine the award of student aid must still be somewhat tentative. The point made by certain writers seems well-grounded, that the granting of loans should not be closely restricted to students

of conspicuously high academic rank, but should be extended to any student who is of a type that the college is justified in retaining and who will probably be able to repay the loan.

The particular emphasis of the small college in evaluating the service it renders has been its assertion that it prepares students for leadership and community service. Whether or not some of these assertions of superiority to the large state and private universities are well-founded, the assertions are accepted by the many donors to small colleges and by the families whose sons and daughters attend them. Little factual evidence has been presented either for or against these assertions of superiority. In the allocation of student-aid grants, particularly of the relatively large ones, the small college has an extraordinary opportunity to select students most likely to support these assertions.

Another aspect of the allocation of student-aid grants is the use of such aid to stimulate the entrance of particularly promising students into certain vocations of especial social value. At present the fees of ministerial students are remitted in many colleges. This practice has been criticized, partly on the basis that all ministerial students are aided alike, irrespective of individual differences in merit. There should be no objection, if the denominational college, especially when it receives aid from the denomination, aids the especially promising ministerial students. At the same time, students interested in other vocations with low salaries and of social benefit could well be aided in like manner. Students of outstanding promise might be encouraged through the use of student-aid grants to enter such professions as teaching, social work, or research work.

The issues and problems involved in the student-aid program, outlines above, are those which exist under the present systems of financing colleges. If fees were increased to a full-cost basis, the problems would become more serious, in that the contrast would be sharpened between the full cost of education paid by some students and the free or partially fee tuition granted to others. The justification of relieving certain students of the responsibility of paying for their education would lie in the careful selection of such students on the basis of a well-formulated policy of student aid.





